

CDC WINNABLE BATTLES FINAL REPORT



**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention



CDC WINNABLE BATTLES FINAL REPORT



TOBACCO



NUTRITION,
PHYSICAL
ACTIVITY,
AND
OBESITY



FOOD
SAFETY



HEALTHCARE-
ASSOCIATED
INFECTIONS



MOTOR
VEHICLE
INJURIES



TEEN
PREGNANCY
IN THE
U.S.



HIV

Executive Summary

With an annual budget of more than \$13 billion and more than 15,000 staff, CDC has facilities across the U.S. and works in more than 50 countries around the world. Almost 85% of CDC's domestic funding is provided directly to state and local governments to detect and control disease, to prevent the leading causes of death, and to prepare for health threats.

Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them. By identifying priority strategies, defining clear targets, and working closely with public health partners, significant progress has been made in the health burden from diseases and conditions targeted through Winnable Battles.

CDC has identified strategies and established milestones and metrics to ensure significant progress is made in all the Winnable Battle areas. Each area has developed a clear set of strategies and targets that are rooted in CDC's strategic priorities:

- Tackling the leading causes of illness, death, injury and disability
- Strengthen collaboration between public health and health care to improve the health of all Americans

- Strengthen health security at home and abroad.

Together with our partners, we are improving health. Fewer than 15.1% of adults and 10.8% of youth currently smoke cigarettes. Teen pregnancy rates have declined consistently and reached a historic low in 2015 with 22.3 births per 1,000. Both of these Winnable Battles have reduced rates beyond their 2015 targets. The Winnable Battles were chosen based on the magnitude of the health problems and the ability of CDC and its public health partners to make significant progress to improve outcomes. While much progress has been made, work remains to reduce the health burdens from these diseases and conditions.

"Investing in public health builds a foundation for a strong and healthy society and contributes to lowering the cost of health care. Investing in proven preventive services and strong policies helps us to avoid unnecessary costs later," said CDC Director Thomas R. Frieden, M.D., M.P.H., September 2010

Progress to Date

Targets

A comprehensive set of indicators establishes baselines and targets for all Winnable Battle areas. These indicators help measure the impact of programs and policies on the nation's health, and support the Department of Health and Human Services' strategic plan and other priorities. The

related targets are ambitious yet achievable, evidence-based, and specific to the priorities and opportunities within each of the Winnable Battle health areas.

This dashboard gives a snapshot of each indicator by comparing recent data trends to the 2015 Winnable Battle targets.

- **Red Circle**=Did not make significant progress or did not reach 2015 target
- **Yellow Rectangle**=Some progress made, but slowly or target was not reached
- ▲ **Green Triangle**=On track to reach 2015 target, but final data not available
- ✓ **Green Checkmark**=Exceeded 2015 target

Winnable Battles Targets		Progress
Tobacco	Decrease the percent of adults who smoke cigarettes by 17.5%	✓
	Decrease the percent of youth who smoke cigarettes by 12%	✓
	Increase the proportion of the U.S. population covered by smoke-free laws by 59%	✓
Nutrition, Physical Activity, and Obesity	Reduce the proportion of children and adolescents age 2–19 who are obese by 8%	■
	Increase the proportion of infants who are breastfed at 6 months by 35%	■
Food Safety	Reduce foodborne illness caused by <i>Salmonella</i> by 14.5%	●
	Reduce foodborne illness caused by Shiga toxin-producing <i>Escherichia coli</i> (STEC) O157:H7 by 29%	■
Healthcare-associated Infections (HAIs)	Reduce central line-associated blood stream infections (CLABSI) in hospitals by 60%	▲
	Reduce healthcare-associated invasive methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) by 60%	▲
	Reduce surgical site infections (SSI) in hospitals by 30%	▲
	Reduce catheter-associated urinary tract infections (CAUTI) in hospitals by 30%	●
Motor Vehicle Injuries	Reduce fatalities due to motor vehicle crashes by 31%	■
Teen Pregnancy	Decrease teen birth rates by 20%	✓
HIV in the U.S.	Reduce the number of HIV diagnoses by 25%	■
	Increase the percent of people living with HIV who know their status by 11%	▲

Data Changes from Baseline to Current Data Year

Winnable Battles Indicator		Baseline	Current Status	Target (2015)
Tobacco	Decrease the percent of adults who smoke cigarettes by 17.5%	20.6% (2008)	15.1% (2015)	17.0%
	Decrease the percent of youth who smoke cigarettes by 12%	20.0% (2007)	10.8% (2015)	17.6%
	Increase the proportion of the U.S. population covered by smoke-free laws by 59%	36.7% (2008)	58.7% (2016)	58.5%
Nutrition, Physical Activity, and Obesity	Reduce the proportion of children and adolescents age 2–19 who are obese by 8%	16.8% (2007–2008)	17.2% (2014)	15.4%
	Increase the proportion of infants who are breastfed at 6 months by 35%	43.5% (2006)	51.8% (2013)	58.9%
Food Safety	Reduce rate of foodborne illness caused by <i>Salmonella</i> by 14.5%	15.2 (2006–2008)	15.9 (2015 prelim)	13.0/100,000
	Reduce rate of foodborne illness caused by Shiga toxin-producing <i>Escherichia coli</i> (STEC) O157:H7 by 29%	1.2 (2006–2008)	0.9 (2015 prelim)	0.85/100,000
Healthcare-associated Infections (HAIs)	Reduce central line-associated blood stream infections (CLABSI) in hospitals by 60% (standardized infection ratio (SIR))	1.0 (2006–2008)	0.5 (2014)	0.4
	Reduce healthcare-associated invasive methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) by 60%	27.08 (2007–2008)	17.3 (2014)	10.83/100,000
	Reduce surgical site infections (SSI) in hospitals by 30% (SIR)	1.0 (2006–2008)	0.8 (2014)	0.70
	Reduce catheter-associated urinary tract infections (CAUTI) in hospitals by 30% (SIR) ¹	1.0 (2009)	1.0 (2014)	0.70
Motor Vehicle Injuries	Reduce fatalities due to motor vehicle crashes by 31%	13.8 (2007)	10.9 (2015)	9.5/100,000
Teen Pregnancy	Decrease teen birth rates by 20%	37.9 (2009)	22.3 (2015)	30.3/1,000
HIV in the U.S.	Reduce the number of HIV diagnoses by 25% ²	48,366 (2008)	39,718 (2014 prelim)	32,723
	Increase the percent of HIV-infected persons who are aware of their HIV infection status by 11%	80.9% (2006)	87.0% (2013)	90%

¹CAUTI data reflect progress in acute-care hospitals only. Although 2009–2014 data show no change in overall CAUTI SIRs, specific hospital units showed major changes in CAUTI SIRs: 24% decrease in hospital wards and 16% increase in hospital intensive care units (ICUs).

²New indicator — The National HIV/AIDS Strategy updated to 2020 uses new HIV diagnoses, instead of HIV incidence, to measure the reduction in new infections because incidence estimates do not provide a timely and consistent way to monitor progress. The estimated number of new HIV infections has changed and is likely to change over time due to changes in HIV testing technology and incidence estimation methods, which make it difficult to use incidence as an indicator to measure progress. HIV diagnosis data are now being used to monitor progress in NHAS 2020 and will be included in the new DHAP Strategic Plan and other indicator-related documents. Because the original NHAS (2010) and DHAP Strategic Plan (2010–2015) used incidence and not diagnosis, using diagnosis data to measure progress for 2010–2015 is new and required setting a target for 2015. To set the target for 2015, 2010 was used as a baseline and the 2010 baseline data (unadjusted HIV diagnoses) came from a data request from Dr. Frieden to the Division for HIV/AIDS. The annual targets assume an accelerated rate of change that was expected in a given year: 5% in 2011, 15% in 2012, 20% in 2013, 30% in 2014, and 30% in 2015. The 2013 result is reported for “current,” as 2013 diagnosis data have 18 months of reporting delay and are considered stable. 2014 diagnosis data are available but are considered preliminary, as they only had 6 months of reporting delay.



Background

The Opportunity

CDC is the nation's leading public health agency, dedicated to saving lives and protecting the health of Americans. CDC field staff work in all 50 states, 8 U.S. territories, and more than 50 countries.

In 2010 CDC took the opportunity to evaluate where we could make the greatest impact for the most Americans. It is not unusual for CDC to set public health priorities that may be addressed in a meaningful way during a clearly defined timeframe. These priorities are often established in support of Department of Health and Human Services (HHS) and White House initiatives. CDC's priorities are often based on the scope of the health problem, the ability to have significant health impact, and the ability to address health costs.

But the idea of Winnable Battles took setting priorities and creating synergy to a new level. The initiative focused on several high-burden areas with known, effective, evidence-based strategies where progress could be made in a relatively short timeframe.

"Winnable Battles" describe public health priorities where CDC and public health can make significant progress quickly—generally within one to four years. For an agency as large and diverse as CDC, the idea of a highly focused set of priorities, or battles, which could be reexamined with senior leadership support to accelerate progress, was enticing but also complex.

The Initial Challenges

Identifying a handful of issues as "Winnable Battles" may have come across as diminishing the important work that fell outside the "Winnable Battles" arena. It had to be made clear that the "Winnable Battles" designation did not validate or invalidate ongoing work. Rather, the designation served as a catalyst for accelerating progress, and creating that understanding in the agency was critical. CDC's intent was to bring additional attention to these critical health issues and

rally diverse resources and partnerships (both internal and external) to accelerate measurable health impact.

The Criteria

The Winnable Battles concept was born out of the desire to improve the health and safety of the nation as quickly as possible for as many as possible. A Winnable Battle had to be a health issue of high concern. It carried a significant burden, affected many people and incurred considerable costs. Known, effective strategies existed that could be employed to help lessen the burden. Winnable Battles was not a research initiative or a discovery process, but a reframing of issues by focusing on the most impactful priorities.

The Choices

Six initial programs were identified as Winnable Battles: tobacco; nutrition, physical activity, obesity, and food safety; healthcare-associated infections (HAIs); motor vehicle injuries; teen pregnancy; and HIV in the U.S. These areas were selected because they presented the following opportunities:

- They addressed public health priorities that have a large-scale impact on health.
- Evidence-based interventions existed to address the issue and could be broadly implemented.
- Intensive focus and efforts could have a significant impact in a relatively short period of time.

These six areas varied in size, funding mechanisms, and budgets. Some had been a focus of CDC's for decades. Some were led by other agencies who had more funding and a greater voice on the issue and the CDC role was quite small relative to other agencies. Some were small CDC programs but grappling with a huge problem. It wasn't the existing program parameters that qualified it as a Winnable Battle, but the opportunity to make a difference quickly in the health and safety of the country.

Taking Action

Several principles guided the Winnable Battles initiative and emerged as key success factors, including prioritization, data and information systems, and accountability.

Prioritization

Having a clear understanding of the goal—to save as many lives and prevent as much disease as possible—set the foundation for determining the priority for each Winnable Battle. Many approaches to a health problem may deliver progress, but for Winnable Battles, focus on the most effective options and priorities changed the way the program leaders conceived and developed programs.

Initial discussions centered on examining existing program activities and future goals, without yielding to perceived barriers or previous challenges. Together, program staff and agency leadership identified the most effective, evidence-based strategies and the best ways to support the program to deliver the biggest impact.

Data and Information Systems

Data was used to drive decisions, identify the right strategies and monitor progress. A free, online portal was developed to provide easy access to data on a variety of health indicators. Known as Sortable Stats, the online portal houses an interactive data set with state-level data for the 50 states, D.C. and U.S. territories. This tool provides data for some Winnable Battles topic areas and is intended to serve as a resource in the promotion of policy, system, and environmental changes across public health programming, not limited to Winnable Battles.

Accountability

Frequent meetings with the CDC Director helped establish accountability as an expectation from the outset. At the beginning, each Winnable Battle team met monthly with Dr. Frieden and the leadership team. The interactive nature of Winnable Battle meetings required people to do what they said they would do and to know where things stood and why. Answers to questions backed up with data or evidence and detailed updates were expected. Results had to answer the “So what?” question in a meaningful way that moved the program forward.

Staff from science, policy, program and communications offices participated in meetings and were equally accountable for their assigned tasks. Later, monthly meetings with the Director moved to quarterly with senior staff participation, but the accountability that had been instilled at the outset remained.

Collapsing the Hierarchy

Early on, Winnable Battles work created a flatter organizational hierarchy within the initiative. Discussion

centered not on peer-to-peer interaction but on subject matter expertise, regardless of seniority, rank or grade. Participants were open to learning new things—whether from a more junior policy advisor or a senior scientist—to help make the best decisions possible.

The organic collapsing of the hierarchy and openness to learning helped drive greater efficiency, faster decision-making and ultimately accelerated the pace of the Winnable Battles programs. Leadership was more knowledgeable and better equipped to carry forward Winnable Battles messages and connect with stakeholders outside CDC in meaningful ways. CDC program leadership better understood how the Office of the Director could assist them with a connection at another agency or navigating through obstacles. All meeting participants expected to be asked to contribute to the initiative and were committed to deliver.

Reporting

As part of the initiative, Winnable Battles program staff reported progress against their plans to senior leadership. Successes, priorities for the next quarter, challenges and requests for senior leadership support in the areas of data, guidelines/best practices, policies/incentives and state and local infrastructure were noted. Senior agency leadership were updated on any cross-cutting accomplishments in the areas of providing data to drive action, supporting state and local policy change, promoting best practices and strengthening the science and evidence base.

Beyond internal reporting, Progress Reports were made available to all stakeholders and the public on www.cdc.gov/winnablebattles. The web site also housed a variety of communications materials including presentations on each Winnable Battle outlining burden, priority strategies and programming updates easily accessible to states.

Metrics

Each topic area identified indicators of health that would be tracked during the initiative. Considerable analysis was conducted to identify indicators, most appropriate data sources, levels of data and to set the baseline and targets to achieve. Ambitious yet obtainable goals were identified for completion by 2015. Finalizing the indicator, baseline and target as a team helped drive accountability because Winnable Battles participants were invested in the process and had a clear vision of the path forward.

Opportunities as a Winnable Battle



Winnable Battles programs strengthened and advanced their work by taking advantage of both planned and unforeseen opportunities. Meetings provided access to the collective knowledge of senior leadership and subject matter experts on a regular basis. The process of developing a Winnable Battles strategy and ensuing action plan ensured programs focused on high impact priorities. Setting a baseline and target defined a clear goal in measureable terms.

Vital Signs

The CDC *Vital Signs* monthly report highlights a different public health issue each month and includes an MMWR

Vital^{CDC}**signs**[™] Early Release, graphic fact sheet and website,

media release, virtual town hall and social media tools. Although participation in a monthly Vital Signs increased the amount of work for each topic area, it also provided an opportunity to elevate the issue and identify what specifically can be done at the federal, state, local, and healthcare provider levels. Throughout the course of the Winnable Battles initiative, multiple Vital Signs were published on each Winnable Battle topic area, keeping CDC priorities “top-of-mind” for stakeholders. Significant communications support for each Vital Signs publication resulted in social and traditional media coverage to further drive the public health discourse.



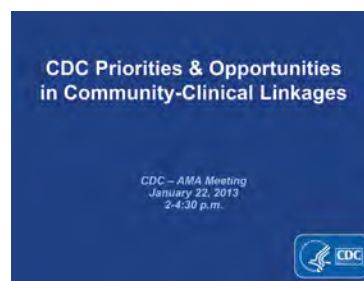
Advancing the Conversation around Winnable Battles

In addition to this systematic approach to creating opportunities for advancement, other

opportunities developed organically. One example is the State Health Officer (SHO) trainings led by the CDC Office for State, Tribal, Local and Territorial Support (OSTLTS). The goal of the orientation is to help new health officials initiate and improve relationships with CDC leaders and health officials to strengthen the public health system. Winnable Battles are framed as CDC public health priorities during SHO on-site orientation and participants are asked to consider identifying their own state's Winnable Battles once back home. Learning about Winnable Battles is cited as a key take-away from the annual SHO session.

Educating public health stakeholders about CDC work often included mention of Winnable Battles. The Prevention Status Reports (PSR), another OSTLTS product, are designed to highlight 10 important public health problems and concerns. Six of the 10 topics covered by the PSR publication and web site are Winnable Battles.

Programs identified as Winnable Battles were often given opportunities to tell their stories in venues and with



Briefing to the American Medical Association January 22, 2013 by Dr. Janet Collins, former Associate Director of Program, Office of the Director, CDC

audiences they may not have reached otherwise. Because they were recognized as CDC public health priorities, Winnable Battles were often on the agenda with visiting public health officials, congressional staff, American Indian and Alaska Native health officials, government agencies and non-government organizations (NGOs). Briefings were held at CDC, online and at NGO sites.

State Strategy Meetings

Working with the National Conference of State Legislators (NCSL) and the Association of State and Territorial Health

Officials (ASTHO) also advanced Winnable Battles work. CDC funded NCSL and ASTHO to host several two-day seminars called “Cost-Effective Strategies in Public Health: The Winnable Battles Initiative.”

The meetings were designed to educate state officials on Winnable Battles and opportunities to improve the health of state residents. Participants included State

“Creating an environment where CDC scientists and state health officials can educate each other and learn from one another is very powerful,” said Kathleen Ethier, PhD, Director of the Program Performance and Evaluation Office, CDC. “The synergy and enthusiasm created at this meeting helps motivate participating state health officials, legislators and others to take back what they’ve learned to address their state’s health priorities in the most effective way possible.”

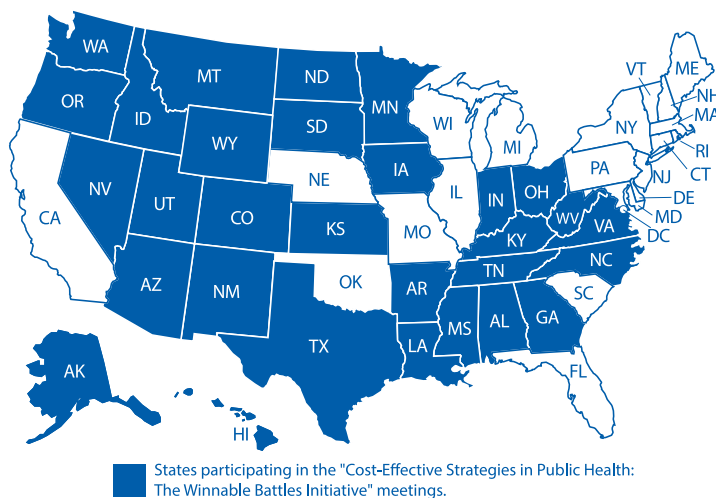
Health Officers (SHO), Medicaid Directors, legislators, Department of Health officials and others in public health. Speakers from the CDC, health professionals with expertise in these health issues, business leaders and

“Legislators in the states are very concerned with their state budget issues,” says Karmen Hanson, Health Program Manager at NCSL. “They found it very beneficial to gather around a table outside of their states and focus on the most important health issues facing their state. They also enjoyed hearing from other states on how they have addressed Winnable Battle issues.”

state leaders who have successfully developed and implemented policies related to these areas were featured. Prior to, during and after the seminar, NCSL and ASTHO worked with states to draft Winnable Battles Action Plans specific to their states which outlined strategies and

shared with state leaders informed their decisions. State leaders also benefited from listening to and learning from officials from other states grappling with similar health issues. Participants also gained awareness of CDC resources to help combat health issues in their states. In total, 32 states participated and meetings were held in 2011, 2012, 2014, 2015 and 2016.

Partnerships



Winnable Battles also benefited by adoption and promotion through partner organizations. One example is a toolbox developed and distributed by the National Conference of State Legislators (NCSL). The toolbox provided an overview of Winnable Battles and examples from select states (Colorado, Connecticut, Georgia, Kentucky, Massachusetts and New York) on actions they took to address a specific health issue. In 2013 the nine-page booklet, *The Winnable Battles Initiative, Strategies and Opportunities to Improve Health*, was distributed to state policy makers and posted online. In addition, organizations including the National Association of County and City Health Officials (NACCHO) and the Public Health Foundation (PHF) partnered with CDC to build awareness and knowledge of Winnable Battles. NACCHO adopted CDC Winnable Battles and created one of its own on diabetes. Winnable Battle resources from PHF’s Online Store, courses from TRAIN, and other tools offered through PHF were used by public health and other professionals to build the capacity to be successful.

Progress by Winnable Battle Area

Progress toward targets has varied in each of the Winnable Battle topic areas, with some meeting goals ahead of schedule and others still working towards their final goals. Following are visual representations of progress and data trends as well as detailed summaries of CDC contributions associated with each Winnable Battle.



TOBACCO

Smoking is the leading cause of preventable death.

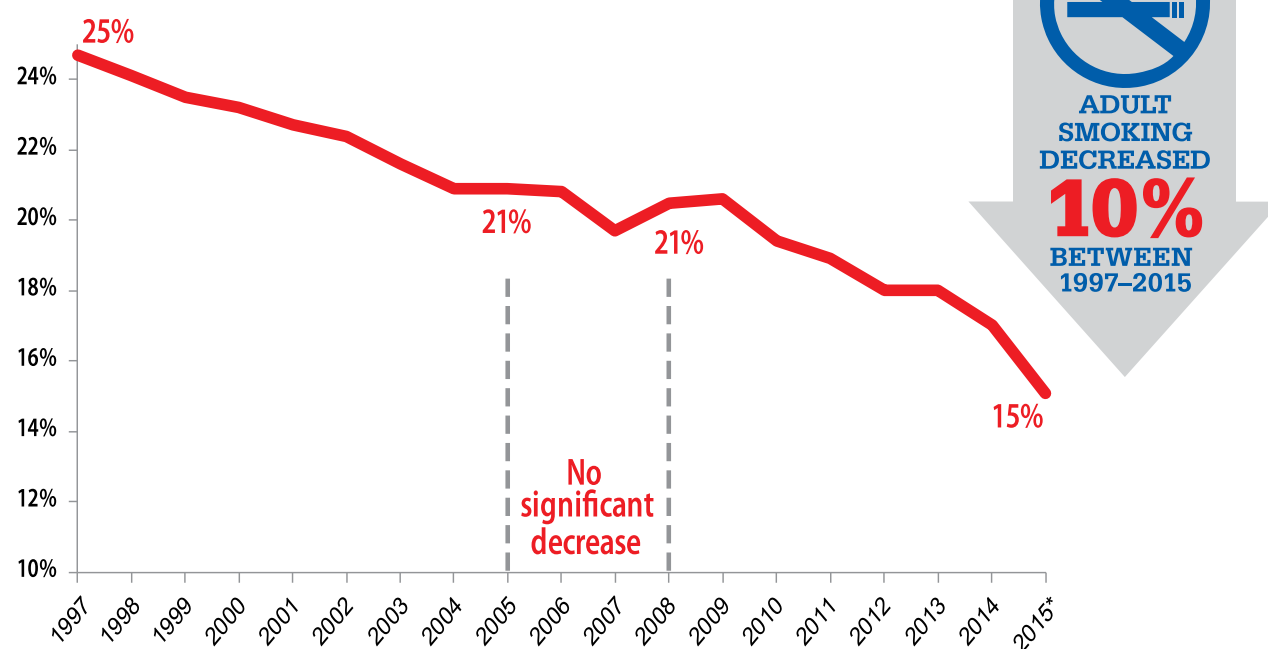
The proportions of adults and youth who smoke cigarettes have been decreasing. The percentage of current adult cigarette smokers decreased from 20.6% in 2009 to 15.1% in 2015, exceeding CDC's 2015 Winnable Battle target of 17%. Youth cigarette smoking rates have also declined by almost half, from 20% in 2007 to a new low of 10.8% in 2015. By achieving a youth cigarette smoking rate of 10.8% in 2015, which is the lowest teen cigarette smoking rate recorded since data collection began in 1991, the United States has exceeded its national Healthy People 2020 objective of reducing adolescent cigarette use to 16% or less. Per capita combustible

tobacco product consumption declined from 1,342 in FY 2012 to 1,211 in FY 2015. In addition, the proportion of the U.S. population covered by a state or local comprehensive smoke free law has increased to nearly 60% of the population as of June 30, 2016.

Despite gains, nearly 40 million people in the United States currently smoke cigarettes. Cigarette smoking is responsible for more than 480,000 deaths per year in the United States, including nearly 41,000 deaths resulting from secondhand smoke exposure. Tobacco-related deaths account for about one in five deaths annually, or 1,300 deaths every day.

Adult cigarette smoking rates have fallen in recent years.

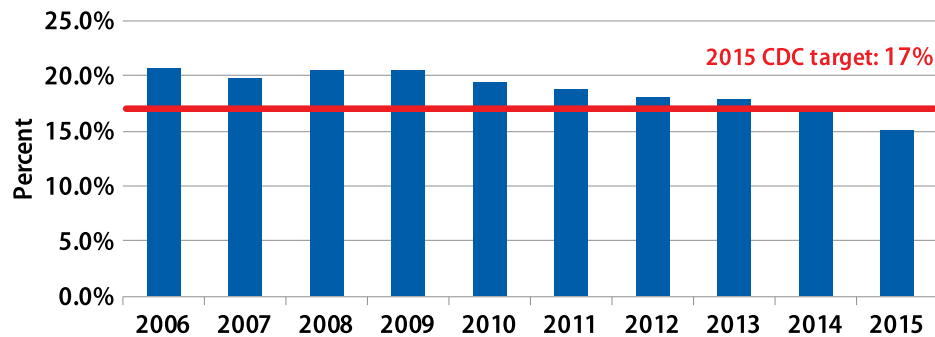
Prevalence of current smoking among adults age 18+, U.S., 1997–2015



CDC/NCHS, National Health Interview Survey, 1997–2015, Sample Adult Core component; *2015 data are preliminary;
http://www.cdc.gov/nchs/data/nhis/earlyrelease/earlyrelease201605_08.pdf

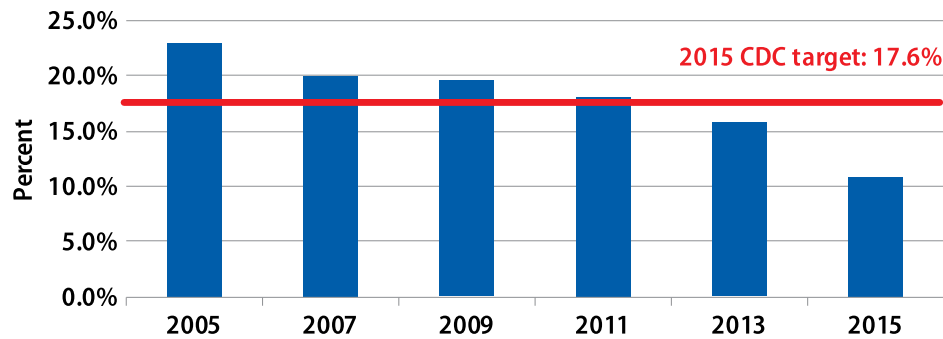
Trends in Tobacco Winnable Battle Indicators.

Trends in percentage of adults who smoke cigarettes, 2006–2015



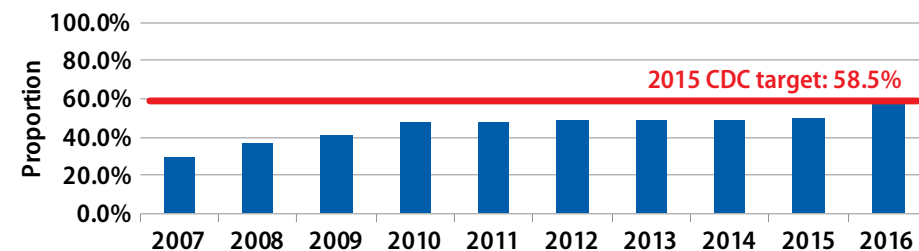
Source: National Health Interview Survey (NHIS)

Trends in percentage of youth who smoke cigarettes, 2007–2015



Source: Youth Risk Behavior Surveillance System (YRBSS)

Trends in proportion of U.S. population covered by comprehensive state and/or local laws making workplaces, including restaurants and bars, smoke-free, 2007–2016



Source: American's for Nonsmokers' Rights (ANR), CDC

Considerations in Choosing Tobacco as a Winnable Battle

- Smoking was the leading cause of preventable death in 2010 and remains so.
- When Winnable Battles began, an estimated 46 million American adults currently smoked cigarettes and cigarette smoking caused approximately 443,000 deaths annually.
- HHS was developing *Ending the Tobacco Epidemic, A Tobacco Control Strategic Action Plan for the U.S. Department of Health and Human Services*, released November 2010 and outlining proven strategies for tobacco prevention and control.

Challenges/Obstacles

- The range of emerging tobacco products, including e-cigarettes, complicates the current public health landscape.
- States have billions of dollars from tobacco taxes and tobacco industry legal settlements to prevent and control tobacco use. However, states currently use a very small amount of these funds for tobacco control programs.

CDC Contributions in Tobacco Winnable Battle Initiative

Monitoring tobacco use and prevention policies

- The 50th Anniversary Surgeon General's Report, The Health Consequences of Smoking—50 Years of Progress, was released in January 2014. Despite progress, smoking and exposure to secondhand smoke are responsible for more than 480,000 premature deaths annually and more than \$300 billion in health care expenses and other economic costs each year.
- Patterns of youth tobacco product use continue to be monitored through the National Youth Tobacco Survey. As of 2014, e-cigarettes became the most commonly used tobacco product among U.S. youth. In 2015, e-cigarettes were the most commonly used tobacco product among high school students (16.0%) and middle school students (5.3%).

Protecting people from secondhand smoke

- In 2014, 76 municipalities around the country acted to protect the public from exposure to secondhand smoke by implementing smoke free ordinances. In 2015, an additional 72 municipalities did so. As of June 2016, nearly 60% of Americans were covered by comprehensive laws making all indoor areas of workplaces, restaurants, and bars 100% smoke-free. Twenty-seven states and the District of Columbia have comprehensive statewide smoke-free laws as of June 30, 2016.
- In 2015 and into 2016, CDC has provided the Department of Housing and Urban Development (HUD) with technical assistance in proposing and

planning to implement a smoke-free policy in public housing. Once final, the rule would cover more than 700,000 units, protecting residents from exposure to secondhand smoke. A CDC study found that prohibiting smoking in public housing would yield annual cost savings of \$153 million from averted secondhand smoke-related care, renovation expenses, and smoking-attributable fire losses.

Offering help to quit tobacco use and warning about the dangers of tobacco

- The multi-year campaign “Tips from Former Smokers” which reignited national awareness of the health consequences of tobacco use inspired greater call volume to 1-800-QUIT-NOW than ever before. The TIPS campaign has proven to be a “best buy” in public health by costing just \$393 to save a year of life, well under the widely accepted limit for the cost-effectiveness of a public health program of \$50,000 per year of life saved. Between 2012–2015, Tips has helped at least 400,000 smokers quit for good and remains effective over time.

Working with states to enforce bans on tobacco advertising, promotion, and sponsorship and raise tobacco taxes

- Two states and the District of Columbia increased tobacco taxes in 2014, a proven strategy to reduce tobacco use. An additional nine states raised tobacco taxes in 2015, and one state raised the minimum price.

State Spotlight: Hawaii and Tobacco Control

State comprehensive tobacco control programs work and are a public health “best buy.” Comprehensive tobacco control programs promote tobacco cessation, prevent tobacco initiation, eliminate deadly secondhand smoke exposure, and eliminate tobacco-related disparities. Key elements of these programs include policies such as comprehensive smoke free policies, raising the price of tobacco products, and protecting local control by eliminating preemption.

Hawaii has worked for decades on all of these policy approaches, including passing a comprehensive smoke free law in 2006 and raising the cigarette excise tax rate from \$1.00 in 2000 to its current rate of \$3.20. As a result of these policy approaches, as well as strong public education campaigns and investment in tobacco prevention and control, Hawaii has seen dramatic results in health outcomes. For example, in 2013, the high school cigarette smoking rate in Hawaii was 10.4% — much lower than the national rate of 15.7%.

In May 2015, Hawaii added electronic nicotine delivery systems, including e-cigarettes, to its comprehensive statewide smoke free law — protecting bystanders from involuntary exposure to aerosolized nicotine and maintaining “clean air” as the public health standard. Nicotine exposure can harm pregnant women and their fetuses, as well as damage brain development. Hawaii is now one of five states that has expanded its comprehensive smoke free protections to electronic nicotine delivery systems.

In May 2015, Hawaii also became the first state to approve raising the legal age of sale of tobacco products to 21 — a promising best practice supported by the scientific literature. This new policy is expected to substantially reduce tobacco use and initiation, especially among teens between 15 and 17 years old.





NUTRITION/PHYSICAL ACTIVITY/OBESITY

Progress has been mixed in this Winnable Battle.

The proportion of infants who are breastfed at 6 months has been increasing. This indicator has exceeded the original Winnable Battles target of 50% by 3.6%.

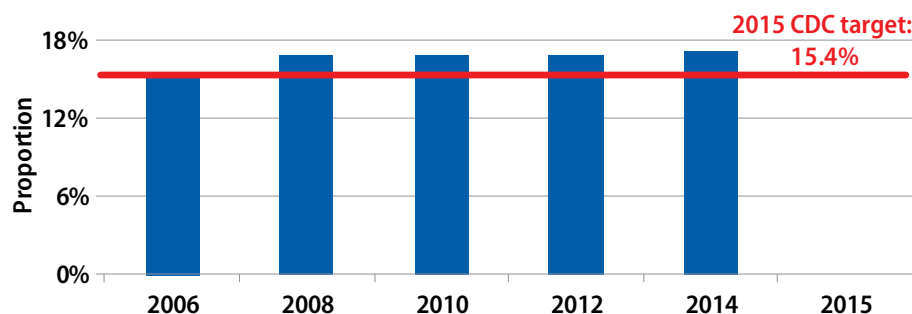
Physical activity helps prevent heart disease, stroke, type 2 diabetes, depression, and some cancers. In 2008, 43.5% of adults met the aerobic Physical Activity Guidelines for Americans. That percentage increased to 49.8% in 2015.

For children and adolescents aged 2–19 years, the prevalence of obesity has remained fairly stable at about

17% and affects approximately 12.7 million children and adolescents. The prevalence of obesity among children aged 2 to 5 years decreased significantly from 13.9% in 2003–2004 to 8.4% in 2011–2014. Children who have obesity are more likely to become adults with obesity. For adults, the prevalence of obesity has remained high at 37.7% in 2013–2014. Adult obesity is associated with a number of serious health conditions including heart disease, diabetes, metabolic syndrome, and cancer.

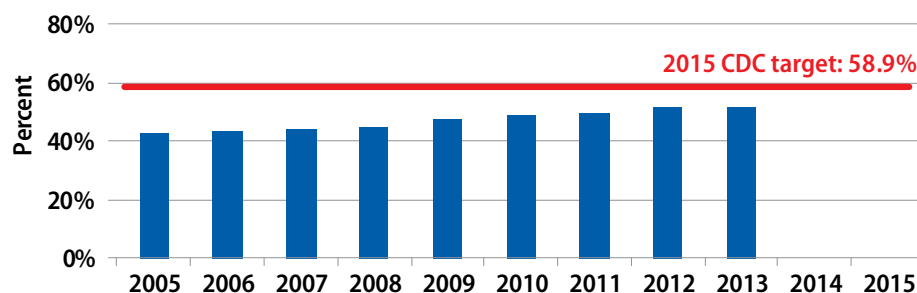
Trends in Nutrition/Physical Activity/Obesity Winnable Battle Indicators

Trends in the prevalence of obesity among U.S. children and adolescents aged 2–19, 2006–2014



Source: National Health and Nutrition Examination Survey (NHANES)

Trends in the percentage of infants who are breastfed at 6 months, 2006–2013



Source: National Immunization Survey (NIS)

Considerations in Choosing Nutrition/Physical Activity/Obesity as Winnable Battle

- Obesity is common, serious and costly.
- Childhood obesity has both immediate and long-term effects on health and well-being for individuals and the nation.
- Breastfeeding is the optimal form of nutrition for infants, and provides numerous health benefits for both children and mothers.
- Regular physical activity helps improve overall health and fitness, and reduces the risk for many chronic diseases including type 2 diabetes, heart disease, high blood pressure, stroke, certain cancers and depression.

Challenges/Obstacles

- Childhood obesity is a complex societal issue. The main causes of excess weight in youth are similar to those in adults, including individual causes such as behavior and genetics. Behaviors can include dietary patterns, physical activity, inactivity, medication use, and other exposures. Additional contributing factors in our society include the food and physical activity environment, education and skills, and food marketing and promotion.

State Spotlight: Alabama Supports Breastfeeding Friendly Environments

The Alabama Breastfeeding Committee (ABC) works to ensure that community breastfeeding services are an essential component of healthcare for all Alabama families. Through coordination and partnering, ABC implemented local lactation groups in each of the state's perinatal regions to address breastfeeding issues at a grassroots level and provide education to local health professionals. Through funding from the CDC and the United States Breastfeeding Committee, ABC and the Alabama Department of Public Health established breastfeeding support groups in birthing facilities, increased the number of Baby Cafés® across the state, provided baby scales to support groups, facilitated provider education, and supported certification or licensing of lactation care providers.

CDC Contributions in Nutrition/Physical Activity/Obesity Winnable Battle Initiative

This team is collaborating across the agency and with federal partners including the Food and Drug Administration, the Office of the Surgeon General, the General Services Administration (GSA) and Let's Move on focused and cross-cutting initiatives to improve nutrition, physical activity, obesity, and breastfeeding outcomes.

Promoting improved nutrition standards and access to healthier foods for children and adults

- CDC supports work in all 50 states and D.C. in ensuring healthier foods are available in early care and education (ECE) settings for children aged 0 to 5 years by implementing improved standards and offering child care provider training.
 - » Between 2010 and 2015, 26 states made 455 improvements to nutrition standards in their state licensing regulations.
- » As of June 2016, over 1,500 ECE programs serving over 145,000 young children participated learning collaborates designed to help them meet high priority nutrition standards.
- » As of July 2016, over 19,800 ECE providers pledged to meet best practices for food, beverages, breastfeeding support, physical activity, and screen time through participation in Let's Move Child Care (LMCC) serving over 1 million children.
- CDC is leveraging opportunities provided by the new Every Student Succeeds Act to strengthen nutrition and physical education activities and programs in schools.
- CDC works to improve the school nutrition

environment with partners such as states, USDA and Let's Move.

- » Between 2008 and 2014 there has been a 23% increase in the number of schools that did not sell less healthy food and drinks (School Health Profiles).
- » Between 2000 and 2014 there was a 29% increase in the number of schools offering vegetables, and a significant increase in the number of schools implementing strategies to reduce sodium in meals (School Health Policies and Practices Study).
- » CDC has supported the Let's Move Salad Bars to Schools initiative of the First Lady and as of July 2016 there are over 4,600 salad bars granted nationally, serving over 2.3 million kids.
- CDC played a key role in drafting standards, *Smart Snacks in Schools*, and implementation plans for other components of the Healthy Hunger Free Kids Act.
- CDC published Healthy Hunger Free Kids Act resource materials, including
 - » [Comprehensive Framework for Addressing the School Nutrition Environment and Services](#),
 - » [Increasing Access to Drinking Water in Schools Toolkit](#),
 - » [Putting Local School Wellness Policies into Action](#) and
 - » [Competitive Foods and Beverages in Schools: A State Policy Analysis](#).
- CDC published the [School Health Guidelines to Promote Healthy Eating and Physical Activity](#) in 2011 and has trained school personnel in all 50 states on the guidelines. CDC's [School Health Index](#), an online school health and safety assessment and planning tool, has been adopted by the Alliance for a Healthier Generation and Action for Healthy Kids.
- CDC supported the adoption and use of the 2011 Food Service Guidelines (FSG).
 - » CDC led the development of FSG resources including tools to enable FSG use, case reports, and research.
 - » CDC works with the [National Prevention Council](#) to promote implementation of FSG among its members, representing 20 federal departments, agencies and offices.
 - » CDC co-led the creation of the Food Service Guidelines Collaborative, which consists of 25 partners representing federal agencies, national non-profits, universities, and state health departments committed to normalizing the availability of more healthful foods in key settings.
- An update to the 2011 FSG was led by HHS/CDC and the General Services Administration (GSA) to align food and nutrition standards with the Dietary Guidelines for Americans, 2015–2020. The updated FSG are under review and expected to be released in late 2016.
- Through the CDC Sodium Reduction in Communities Program (SRCP), ten grantees across the country are working with partners to increase accessibility of healthier food options, focusing on lower sodium products. For example, San Antonio Metropolitan Health District, an SRCP grantee, worked with a large private worksite cafeteria to implement sodium reduction strategies, which resulted in a 22% reduction in average sodium content across the menu.

Promoting increased physical activity in communities, schools, and workplaces

- CDC collaborated with the Surgeon General to develop and release [Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities](#), which recognizes the importance of physical activity for people of all ages and abilities. Released in September 2015, the initiative calls on Americans to be more physically active through walking and calls on the nation to better support walking and walkability for better health. A status report reflecting progress of activities will be released Fall 2016.
- CDC collaborated with CDC Foundation, Hartsfield-Jackson Airport, and the Kresge Foundation to develop and release, "[Promoting Airport Walking: A Guide](#)" in May 2016. The guide helps airport managers and staff to encourage healthy walking habits in airports.
- On June 16, 2016, CDC released the MMWR "[Disparities in Adolescents' Residence in Neighborhoods Supportive of Physical Activity—United States, 2011–2012](#)" which assessed whether the proportion of adolescents who live in neighborhoods supportive of physical activity varied between populations. Results indicated about 2/3 of adolescents 10–17 years lived in neighborhoods that support physical activity. The proportion was lower among adolescents who were non-Hispanic black or Hispanic, overweight or obese, from households with lower socioeconomic status, or in rural areas.
- A Vital Signs-like MMWR and graphic, "Physical Inactivity Among Adults 50 Years and Older—United States, 2014," was released September 2016. CDC also hosted a town-hall meeting and conducted 16 calls and meetings reaching 44 partner groups.
- CDC developed the [Comprehensive School Physical Activity Program](#) (CSPAP) Guide to assist schools and



school districts to develop, implement, and evaluate comprehensive physical activity programs. School faculty in all 50 states have been trained to implement a CSPAP and CDC has developed an eLearning series to facilitate additional trainings.

- CDC published a report that summarized the findings from a roundtable of physical activity and measurement experts convened by CDC and American College of Sports Medicine in 2014. This report identified an overarching strategy to develop a national plan for physical activity surveillance similar to the U.S. National Physical Activity Plan. The purpose of the surveillance plan would be to enhance coordination and collaboration within and between sectors, such as transportation and public health, and to address identified strategic priorities.
- CDC supports work in all 50 states and D.C. in supporting implementation of physical activity standards in early care and education (ECE) settings for children aged 0 to 5 years by implementing improved standards and offering child care provider training.
 - » Between 2010 and 2015, 26 states made 222 improvements to physical activity standards in their state licensing regulations.
 - » As of June 2016, over 1,500 ECE programs serving over 145,000 young children participated in a learning collaboratives designed to help them meet high priority obesity prevention standards, including physical activity.
 - » Between February 2014 and June 2016, nearly 3,000 ECE providers completed online professional development training on physical activity standards developed by Penn State University's Better Kid Care Program and CDC.

Increasing breastfeeding rates by improving breastfeeding support

- More than 18% of all births in the U.S. occur at Baby-Friendly hospitals, up from less than 2% in 2007. This achievement surpasses the Healthy People 2020 goal of 8.1%.
 - » The CDC-funded Best Fed Beginnings project contributed to the acceleration of Baby-Friendly designated U.S. hospitals. As of July 2016, 72 of the 89 Best Fed Beginnings Hospitals achieved Baby-Friendly designation, the global standard for hospital care to support breastfeeding.
 - » CDC funded the EMPOWER Breastfeeding Initiative that is assisting 93 hospitals from 24 states to become Baby-Friendly. As of July 2016, three EMPOWER hospitals achieved Baby-Friendly designation. Two of these hospitals were in Arkansas, the first hospitals in the state to achieve Baby-Friendly designation.
 - » Breastfeeding rates continue to rise. More than half of infants born in 2013 were breastfed at six months.
- From 2006 through 2016, the number of International Board Certified Lactation Consultants increased from 2.1 to 3.8 per 1,000 live births. Professional breastfeeding support can help mothers start and continue breastfeeding to meet personal goals and national health recommendations.
- From 2007 to 2015 the national average hospital quality score from the [CDC Maternity Practices in Infant Nutrition and Care \(mPINC\) survey](#) increased from 63 to 79 out of 100. Breastfeeding duration continues to increase as CDC assists more hospitals to adopt evidence-based maternity care practices as measured in the mPINC survey.



FOOD SAFETY

Illness due to *E. coli* has decreased significantly; there is still room to make additional progress on *E. coli* and other foodborne infections, such as *Salmonella*.

Each year, 1 in 6 Americans gets sick by consuming contaminated foods or beverages.

Medical and industry costs of these illnesses exceed

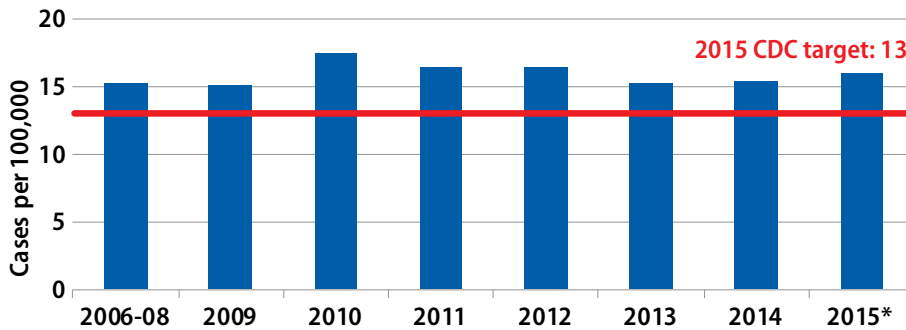
E. coli 0157
INFECTIONS
DECREASED
44%
FROM
1998 TO
2015

\$15.5 billion. CDC estimates that reducing foodborne infections by just 10 percent would keep approximately 5 million Americans from getting sick each year.

Salmonella infections result in more hospitalizations and deaths than any other bacteria found in food and incur approximately \$365 million in direct medical costs annually.

Trends in Food Safety Winnable Battle Indicators

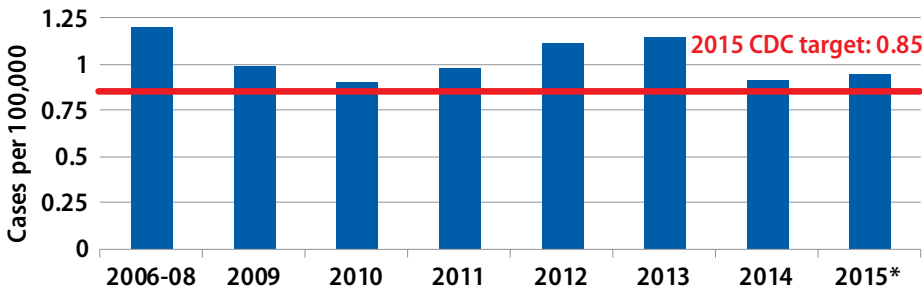
Trends in the rate of infections caused by *Salmonella*, 2006–2015



Source: Foodborne Diseases Active Surveillance Network (FoodNet)

*2015 data are preliminary

Trends in the rate of infections caused by Shiga toxin-producing *Escherichia coli* (STEC) 0157:H7, 2006–2015



Source: Foodborne Diseases Active Surveillance Network (FoodNet)

*2015 data are preliminary

Considerations in Choosing Food Safety as Winnable Battle

- Foodborne illness is a common, costly—yet preventable—public health problem.
- Effective strategies exist to decrease the foodborne illness health burden.
- The Food Safety Modernization Act passed in 2011 underscored the importance of addressing food safety as a CDC Winnable Battle.

Challenges/Obstacles

- Declining state and local resources have impaired the ability to reduce food-related illness outbreaks.
- Changes in food production and supply, including more imported foods.
- New and emerging bacteria, toxins and antibiotic resistance.
- Unexpected sources of foodborne illness, such as ice cream and raw sprouted nut butter.

The Effect of AMD on Food Safety

Since CDC began applying advanced molecular detection (AMD) and enhanced epidemiology methods for nationwide surveillance of *Listeria* infections, CDC has been able to detect seven clusters of illness that would not have been detected by the older methods. The number of cases linked to a food source increased from 13 in 2013 to 103 by the end of 2015. One example is a *Listeria* outbreak that affected at least 32 people in 11 states between October and December 2014. Seven of those people died. Using whole genome sequencing, CDC was able to identify the illnesses as a cluster one week faster than would have occurred with the older methods. CDC worked with state and local health departments, the Food and Drug Administration, and food industries to identify prepackaged caramel apples as the source of the outbreak. Investigation partners were then able to take action to inform the public and get caramel apples off the shelves to keep more people from becoming ill.

CDC Contributions in Food Safety Winnable Battle

The Food Safety Winnable Battles team transformed its approach from outbreak response to combat foodborne illnesses to a proactive, comprehensive program to improve food safety.

Detect and investigate outbreaks to stop the spread and learn how to prevent the next one

- Since CDC adopted whole genome sequencing (WGS) for *Listeria* outbreaks, the median number of *Listeria* illnesses per outbreak has declined by 50%. In FY 2015, outbreak investigations identified caramel apples and ice cream as two food sources of *Listeria*, neither of which had previously been considered as an important source of this severe infection. Those industries are adopting more stringent control measures as a result.
- More than half of all foodborne illness outbreaks are associated with restaurants, banquet halls, and schools and other institutions. The environmental factor data collected through the National Environmental Assessment Reporting System (NEARS) will be used to help determine the causes of outbreaks in these settings, improve outbreak

response efforts, and prevent future outbreaks. In 2014, for 62 out of 110 (56%) closed outbreaks, the underlying environmental factors were identified. As of October 2016, 21 health departments (13 state and eight city/county) are participating in NEARS.

Drive policy and prevention with data and analyses

- CDC data and the results of many CDC-led investigations were formative in shaping the final FDA regulations for the produce safety and preventive controls rules mandated by the Food Safety Modernization Act. CDC data were also used by USDA for its performance standards, further limiting the frequency of *Salmonella* allowed in poultry carcasses, parts, and ground poultry. Ongoing CDC surveillance will be central to tracking the impact of these new prevention measures.
- To enable tailored prevention efforts targeted at specific serotypes, CDC made available online the Atlas of *Salmonella* in the United States, 1968–2011, which summarizes surveillance data on 32 types of *Salmonella* isolates from people, animals, and



other sources. The information is organized by demographic, geographic and other categories and enables the reader to compare trends in *Salmonella* serotypes by following their spread or decline over time and location.

- An analysis published in 2016 found that PulseNet, the national laboratory network that detects foodborne disease outbreaks, prevents an estimated 270,000 illnesses every year from the three most common causes of foodborne illness: *Salmonella*, *E. coli* O157 and *Listeria monocytogenes*. As a result, an estimated \$507 million is saved every year in medical costs and lost productivity. Outbreak investigations supported by PulseNet help identify problems in food production and distribution systems—for example, ground beef, nut butter, and cookie dough. These investigations have led to changes in food production and new federal recommendations – all of which are making our food safer to eat. Analyses have also found that PulseNet speeds up identification and recalls of tainted foods.
- Illustrating the return on investment in food safety programs, CDC estimates prevention of a single fatal case of *E. coli* O157 infection saves \$7 million. In addition, an analysis concluded that the Colorado PulseNet system would recover all its costs if it averted as few as five cases of *E. coli* O157 infection annually.
- Using data from CDC research showing that kitchen manager certification is consistently linked to food safety, CDC staff was successful in petitioning the

Conference for Food Protection (CFP) to strengthen the kitchen manager certification provision in the Food and Drug Administration's (FDA) Food Code. CFP is an influential organization and is the primary means through which the FDA Food Code is revised. The FDA Food Code greatly influences state and local food safety codes and policies, and CDC strongly encourages its adoption. The strengthened kitchen manager certification provision will be in the 2017 FDA Food Code.

- CDC staff led the effort to develop food safety guidelines for the Federal Food Service Guidelines. These guidelines are developed by HHS and GSA for federal food service contractors, and greatly influence food service contractors' actions. Again, data from CDC research was used to support the inclusion of a kitchen manager certification provision, in addition to other important food safety provisions.

Work with partners (public health, industry, consumer groups, etc.) to share food safety data and information to improve practices

- CDC highlighted the focus on preventing foodborne illness through four Vital Signs reports, emphasizing pathways and partnerships that can improve prevention of specific foodborne infections and identifies persons who are particularly susceptible, like the very young, the elderly, and those with impaired immune systems. In 2015, the CDC Foundation

reached out to all companies through [Business Pulse](#), to encourage them to improve food safety in the workplace and make food safety a part of company culture.

- CDC partnered with the country's largest grocery retailer to decrease pathogens such as *Salmonella* and *Campylobacter* in chicken products provided by its suppliers. The program requires the retailer's poultry suppliers to implement holistic controls from farm to final product and is designed to significantly reduce potential contamination levels, including fresh whole chickens and chicken parts. It also requires suppliers to validate that the measures they have implemented are effective through specialized testing.
- CDC educates retail food safety stakeholders (food retailers, food safety program staff, and food safety researchers) to enable improved food safety practices.
- A CDC-funded study on "[Restaurant Manager and Worker Food Safety Certification and Knowledge](#)" (December 2014 *Foodborne Pathogens and Disease*) found that certified managers have better food safety knowledge and improved food safety practices in their establishments.
- Researchers also identified gaps in restaurant policies and practices concerning ill workers (e.g., lack of policies requiring sick workers to stay home), that if addressed, could help prevent foodborne illness outbreaks, according to a CDC-funded study on "[Managerial Practices Regarding Workers Working While Ill](#)" (January 2015 *Journal of Food Protection*).
- CDC also provides training to help professionals identify the root causes of foodborne illness outbreaks. Since 2014, more than 4,400 people (1,005 in the past year) have registered for NCEH's free, innovative, online training for food safety and environmental health

professionals on collecting environmental factor data during foodborne illness outbreak investigations.

Stop the spread of antibiotic resistant bacteria

- In August 2015, CDC released the [2013 National Antimicrobial Resistant Monitoring System \(NARMS\) Annual Human Isolates Report](#) to aid in better understanding trends in antibiotic resistance among *Salmonella*, *Shigella*, and *Campylobacter*, *E.coli* O157, and *Vibrio* species (other than *V. cholerae*). Findings from this report can help doctors prescribe effective treatments for these infections and aid public health officials in more quickly investigating outbreaks from these germs. In FY2016, CDC is awarding \$30 million to states and cities to track, investigate and prevent foodborne disease, \$14 million of which is funded from the Antibiotic Resistance (AR) Initiative in support of the [National Action Plan for the Combating Antibiotic-Resistant Bacteria](#). These grants will help states and cities protect Americans from foodborne outbreaks and improve laboratory-based surveillance for foodborne germs, particularly including antibiotic-resistant bacteria. The grants will support:
 - » Training to ensure that state and local health departments have the ability to use advanced technologies, including [whole genome sequencing](#) which will make it possible to detect and respond to outbreaks earlier. Whole genome sequencing also allows us to detect known markers of antibiotic resistance and is an essential tool in combatting antibiotic resistance.
 - » Thirty-two [whole genome sequencers](#) for state public health laboratories to improve detection of and surveillance for antibiotic-resistant intestinal bacteria found in ill people.





HEALTHCARE-ASSOCIATED INFECTIONS (HAIs)

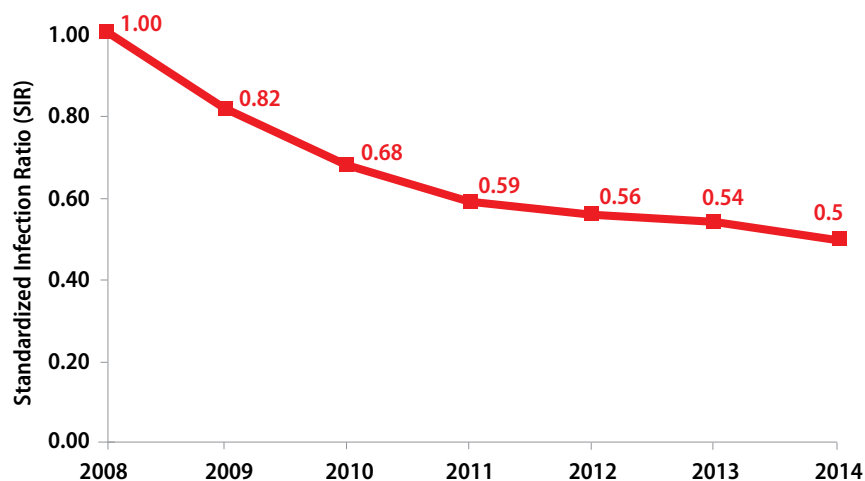
Healthcare-associated infections (HAIs) are complications of healthcare and linked with high morbidity and mortality. Each year, about 1 in 25 U.S. hospital patients is diagnosed with at

least one infection related to hospital care alone; additional infections occur in other healthcare settings. Many HAIs are caused by the most urgent and serious antibiotic-resistant (AR) bacteria and may lead to sepsis or death. CDC uses data for action to prevent infections, improve antibiotic use, and protect patients.

- 50 percent decrease in central line-associated bloodstream infections (CLABSI) between 2008 and 2014³
- 36 percent decrease in healthcare-associated invasive MRSA, 2008–2014. In addition, National Healthcare Safety Network (NHSN) data reported a 13% decrease (2011–2014) for hospital-onset MRSA bacteremia bloodstream infections, confirming overall trends.
- 17 percent decrease in select surgical site infections (SSI)
- 8 percent decrease in hospital-onset *Clostridium difficile* (*C. difficile*) infections between 2011 and 2014
- 24 percent decrease in CAUTI in acute care hospital wards, 2009–2014, and 16 percent increase in CAUTI in hospital intensive care units.⁴

Progress in healthcare-associated infections

SIR for central line-associated bloodstream infections declined sharply

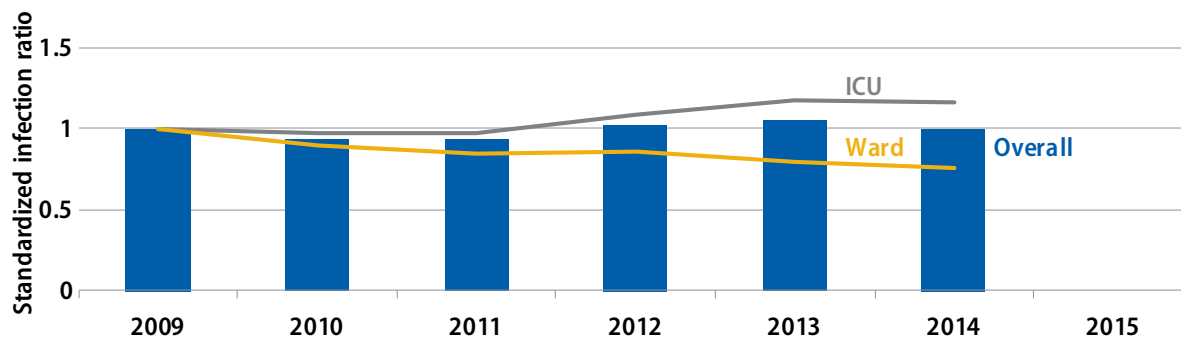


National and State Healthcare-associated Infections Progress Report, published January 2016, based on 2014 data;
www.cdc.gov/hai/surveillance/progress-report/index.html



**SIR FOR
CLABSI
INFECTIONS
DECLINED
50%**

Trends in catheter-associated urinary tract infections (CAUTI) in hospitals 2009–2014⁴

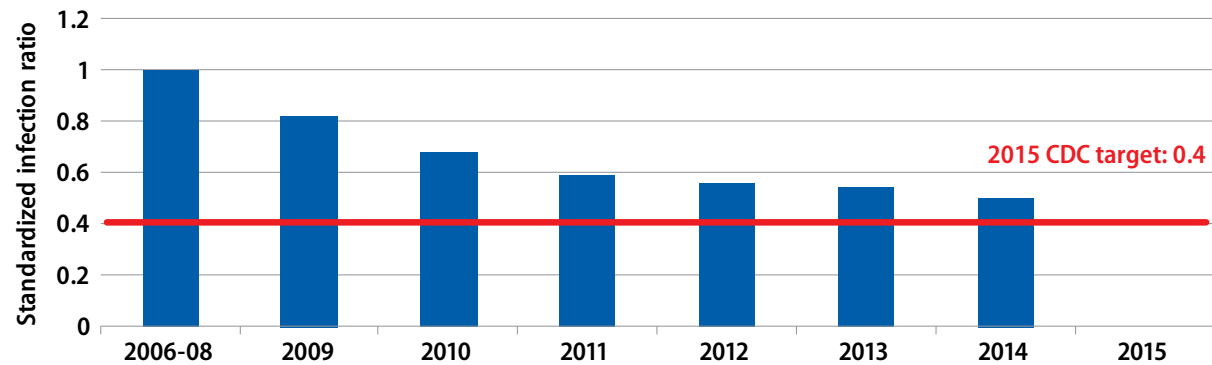


Source: CDC's National Healthcare Safety Network (NHSN)

³CLABSI data reflect progress in acute-care hospitals only.

⁴CAUTI data reflect progress in acute-care hospitals only. Although 2009–2014 data show no change in overall CAUTI SIRs, specific hospital units showed major changes in CAUTI SIRs: 24% decrease in hospital wards and 16% increase in hospital intensive care units (ICUs).

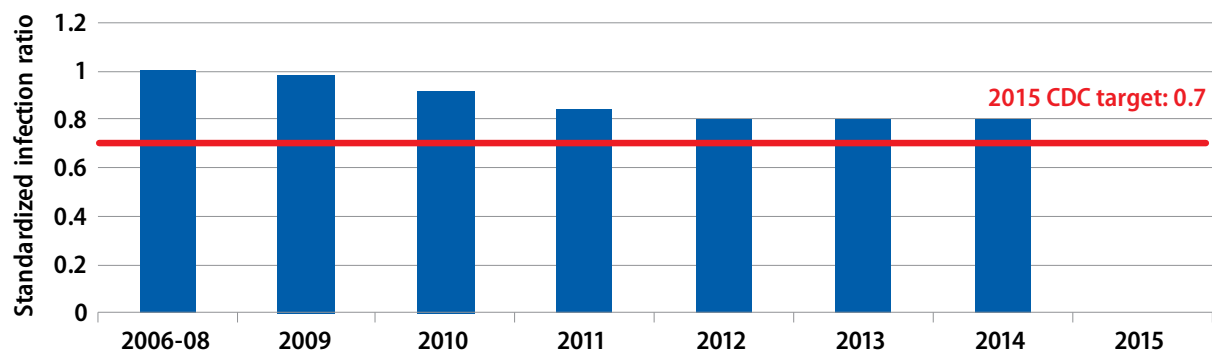
Trends in Healthcare-Associated Infections Winnable Battle Indicators

Trends in central line-associated blood stream infections (CLABSI) in hospitals, 2006–2014³

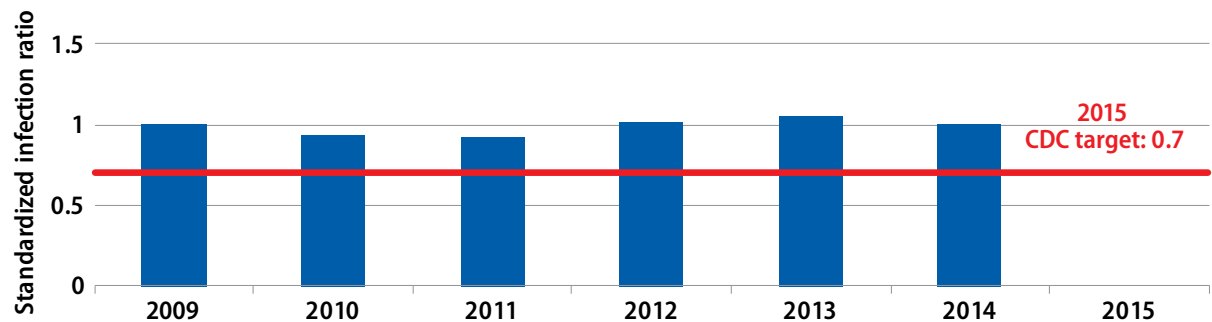
Source: CDC's National Healthcare Safety Network (NHSN)

³ CLABSI data reflect progress in acute-care hospitals only.

Trends in surgical site infections (SSI) in hospitals, 2006–2014



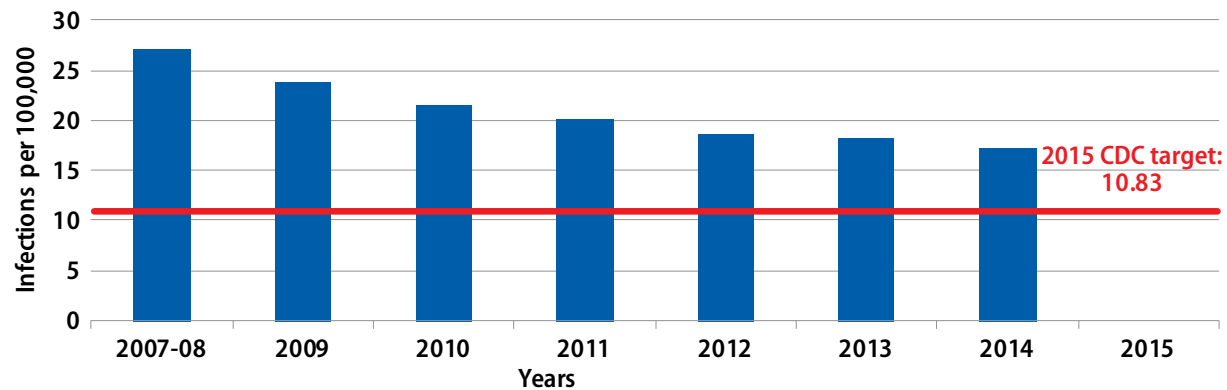
Source: CDC's National Healthcare Safety Network (NHSN)

Trends in catheter-associated urinary tract infections (CAUTI) in hospitals, 2009–2014⁴

Source: CDC's National Healthcare Safety Network (NHSN)

⁴ CAUTI data reflect progress in acute-care hospitals only. Although 2009–2014 data show no change in overall CAUTI SIRs, specific hospital units showed major changes in CAUTI SIRs: 24% decrease in hospital wards and 16% increase in hospital intensive care units (ICUs).

Trends in healthcare-associated invasive methicillin-resistant *Staphylococcus aureus* (MRSA) infections, 2007–2014⁵



Source: Emerging Infections Program/Active Bacterial Core Surveillance

⁵ Starting in 2015, the MRSA data source will be Emerging Infections Program/Healthcare-Associated Infections Component (EIP/HAIC) and National Healthcare Safety Network (NHSN).

Considerations in Choosing Healthcare-Associated Infections as Winnable Battle

- CDC had a long history of tracking HAIs as well as developing and promoting evidence-based recommendations for infection prevention and control, but many infections were not being prevented.
- In the early 2000s, evidence indicated that full adherence to CDC guidelines prevented 70% of CLABSIs in some hospitals; however, too many infections were still occurring.
- In 2009, the federal government added commitment to HAI prevention with the establishment of national prevention goals with the [National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination](#) using CDC's National Healthcare Safety Network (NHSN) to track progress. In addition, for the first time, states received limited funding to support developing infrastructure that could promote and assist in HAI prevention efforts.
- This combination of CDC data, guidelines, national goals, and new state support provided a unique opportunity to make major gains in reducing—and in some cases, eliminating—HAIs.



Challenges/Obstacles

- We needed to develop a [new normal](#) in which HAIs are considered unacceptable and rare events in healthcare.
- We needed commitment from traditional and new public health and healthcare stakeholders at all levels—federal, state, local, health system, healthcare provider, and patient—as well as public and private sectors to make an impact.
- There was a need among many stakeholders to embrace more transparency and accountability.

State Spotlight: Tennessee Reduces HAIs Using Data for Action

Tennessee has made significant progress preventing HAIs by intensely focusing on using actionable NHSN data to drive improvement in healthcare. Tennessee started in 2008 as one of only two states in the country with a CLABSI SIR significantly higher than the national baseline, and by 2014, the state had reduced CLABSIs to 52% below the national baseline.

The Tennessee Department of Health (TDH) HAI & AR (Antibiotic Resistance) Program achieved this by turning to its data: collecting, verifying, and then acting on hospital data to compare facilities, identify where infections were occurring, and then focus targeted prevention in specific facilities in the state and locations within the facility.

Such aggressive action was not possible without TDH's strong partnerships. HAI prevention was integrated into work with CMS-funded networks, state hospital associations, and other local partners to establish priorities, set goals, align strategies, and clearly define roles and responsibilities.

"We've embraced the TAP strategy in Tennessee for several reasons. We feel it has the greatest return on investment, by targeting facilities with the potential to prevent the greatest number of infections," said Dr. Marion Kainer, TDH HAI Program Director.

TDH is a state leader in HAI/AR prevention. In fact, CDC worked with TDH to adapt this early strategy into CDC's TAP strategy, now available nationwide with NHSN data tools. TDH is now working to expand its successful approach across the spectrum of healthcare and HAI/AR threats in the state.

CDC Contributions in Healthcare-Associated Infections Winnable Battle

Since 2008, the combination of CDC data systems, evidence-based recommendations, public health-healthcare programs, and partnerships have contributed to significant reductions of HAIs across healthcare settings. CDC focuses its prevention efforts on major device- and procedure-related HAIs, as well as controlling the spread of infections.

Using Data for Action: Transparency and Accountability

CDC promotes the use of HAI/AR data for action to identify gaps in infection prevention, set goals for prevention, and prioritize interventions for public health impact. Partners use CDC's data systems and data-based tools and resources to drive quality improvement in healthcare.

- CDC's National Healthcare Safety Network (NHSN) is the nation's most widely used system to track HAIs. Facilities use NHSN to not only fulfill federal and state reporting requirements, but also act on their NHSN data to monitor and prevent infections within their facilities. In collaboration with CMS and state partners, CDC increased the number of healthcare facilities reporting to NHSN from ~1,800 to 19,000.
- Every year, CDC releases publicly available data and information on state, regional, and national HAI/AR trends and illustrates progress toward the ultimate goal of eliminating HAIs. These resources include the annual National and State HAI Progress Report, CDC's AR Threat Report (2013), and CDC's AR Patient Safety Atlas (2016).
- CDC started to look at its data and public health impact differently. Not only did CDC continue to estimate disease burden, but CDC also began to assess numbers of infections prevented, lives saved, and medical costs averted through HAI prevention (CDC Vital Signs: Reducing Bloodstream Infections, 2011).
- To increase the use of data for prevention, CDC developed the Targeted Assessment for Prevention (TAP) strategy in 2015 to use NHSN data to identify healthcare facilities and within-facility units with disproportionately high HAI burden and target infection prevention efforts to those locations. TAP reports—currently available for CLABSI, CAUTI, and *C. difficile* infections—are used by CMS-funded networks (e.g., Quality Improvement Networks), health departments, and health systems and facilities across the country to work towards achieving specific HAI-reduction goals.
- CDC identifies gaps where more interventions are needed or where CDC needs to find better ways to collect data. For example, using CDC's NHSN and Emerging Infections Program data, CDC identified the new, emerging AR threats of *C. difficile* and CRE. CDC issued call-to-action *Vital Signs* reports alerting the nation to these rising threats and identifying concrete actions the public health-healthcare community



could take to combat them ([CDC Vital Signs: Stopping *C. difficile* Infections, 2012](#), and [CDC Vital Signs: Stop Infections from Lethal CRE Germs Now, 2013](#)).

Developing Innovative Approaches to Prevention

Wherever CDC works to detect and respond to HAI/AR outbreaks, prevent infections, stop spread of bacteria between patients, and improve antibiotic use, CDC looks to continually improve and develop innovative approaches to maximize public health impact.

- With academic applied research partners in [CDC's Prevention Epicenter Program](#), CDC identifies

and tests new strategies for infection prevention and control, as well as clinical practice. For example, CDC worked with Chicago-area long-term acute care hospitals to [evaluate a novel intervention bundle designed to stop the spread of CRE](#), finding it reduced CRE bloodstream infections by 56%. Likewise, the CDC-designed nationwide [REDUCE MRSA Trial](#) demonstrated that one strategy reduced bloodstream infections by up to 44% and significantly reduced the presence of MRSA and other pathogens in ICUs. Now, these infection prevention strategies are adopted as best practices in healthcare settings across the nation.

- CDC communicates and promotes infection

prevention measures we know work. For example, the public health community has long recognized that antibiotic use puts patients at risk for *C. difficile* infection. With historically high *C. difficile* rates, CDC combined science, policy, and communications to release the *Core Elements of Hospital Antibiotic Stewardship Programs* to show how hospital CEOs and medical officers can improve antibiotic use and protect patients in their facilities (*CDC Vital Signs: Antibiotic Rx in Hospitals: Proceed with Caution*, 2014). CDC has since published core elements of antibiotic stewardship in *nursing homes* (2015) and outpatient settings (2016, pending).

- To identify gaps and strategies to meet Winnable Battle goals, CDC expanded data analytical techniques to predict HAI/AR trends, identify new interventions, and inform program direction. For example, CDC used mathematical modeling to predict increases in HAI/AR infections and *C. difficile* over the next five years without immediate, nationwide improvements in infection control and antibiotic prescribing (*CDC Vital Signs: Stop Spread of AR*, 2015). This led CDC to partner with academic researchers to test interventions within public health-healthcare prevention networks. These partnerships put these findings into practice which, if successful, serve as models for HAI/AR prevention in other areas of the country. This work also provided evidence to support expanding State HAI/AR Prevention Programs to better prevent infections, stop spread, and improve antibiotic use.
- In response to the complexities of combating HAI/AR across healthcare settings and in the community, CDC is integrating its detection, response, and prevention strategies to better protect patients. CDC urges healthcare personnel to always follow infection control recommendations and stewardship to better protect patients from HAIs caused by AR (*CDC Vital Signs: Protect Patients from AR*, 2016). Many of the most urgent and serious AR bacteria threaten patients while they are being treated in healthcare facilities for other conditions, and may lead to sepsis or death (*CDC Vital Signs: Think Sepsis. Time Matters*, 2016).

Expanding Collaborations to Implement What We Know Works

CDC works with diverse public health and healthcare partners to align prevention goals, promote the use of CDC guidelines and data for action, and aggressively work to prevent HAIs and AR infections across the spectrum of care.

- CDC works with other federal agencies to align national prevention goals and integrate proven prevention strategies and measures into national

policies to change infection control practice.

- » CDC and CMS have collaborated closely to include infection prevention and control and antibiotic stewardship programs in revised Conditions of Participation in Medicare and Medicaid programs for acute care hospitals and long-term care facilities. CDC's NHSN data and prevention tools are also used by CMS-funded Quality Improvement Networks.
- » CDC leads the 2016–2017 HHS Agency Priority Goal (APG) to expand stewardship programs nationwide, and worked closely with the CMS-led APGs to reduce CLABSIs (2012–2013) and CAUTIs (2012–2015) nationwide.
- » CDC also works with FDA to protect patients and stop outbreaks from spreading in healthcare facilities. Often, these outbreaks result from either failures in infection control practices or contaminated equipment or medications.
- CDC works with state and local health departments to support local HAI/AR expertise and lab capacity to improve identification and response to emerging threats, like *Candida auris* and *mcr-1*, leading to synchronized action across healthcare and communities to quickly protect patients and control spread.
- » These partnerships expand HAI/AR prevention and antibiotic stewardship programs to implement proven strategies to prevent infections and transmission across healthcare settings.
- » CDC is also implementing more prevention networks—where public health and healthcare work together—in more states to better prevent infections, stop spread, and improve antibiotic use.
- CDC works with health systems, academic and professional organizations, and healthcare consumers to expand strategies for clinical practice and promote tools to prevent infections and stop spread of bacteria across facilities. Each year, CDC works with over 100 partners on the *Get Smart About Antibiotics* Campaign to raise awareness of the threat of AR and the importance of appropriate antibiotic prescribing and use.

In fiscal year 2016, Congress appropriated \$160 million for CDC to fight AR, a testament to the urgent AR threat and highest levels of support for the ambitious public health actions outlined in the *National Action Plan for Combating Antibiotic-Resistant Bacteria* (2015). This is a substantial opportunity for state and local public health, academic, healthcare, and veterinary partners to accelerate our efforts to establish the new normal in which HAIs are considered unacceptable and rare events in healthcare.



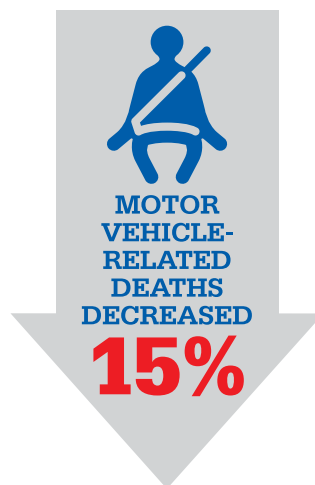
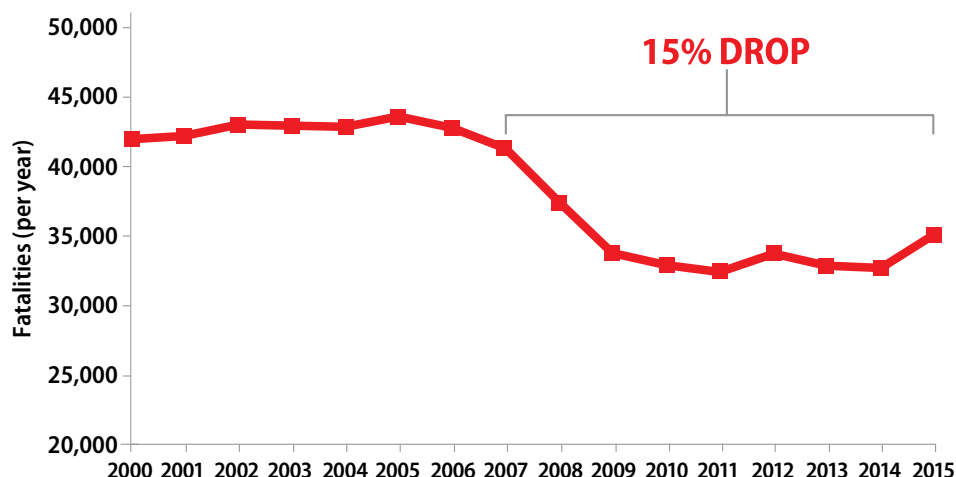
MOTOR VEHICLE INJURIES

For the most part, the number and rate of motor vehicle crash deaths has fallen since 2005; however, the number of deaths in 2015 increased to 35,092 (the highest number since 2008). Continued implementation of proven strategies can save thousands of lives and hundreds of millions of dollars in direct medical costs from motor vehicle crash injuries and deaths each year.

- Motor vehicle crashes are the leading cause of death in the first three decades of Americans' lives.
- Motor vehicle crashes killed over 35,000 people in 2015—that's about 96 people every day.
- Motor vehicle-related injuries send more than 2.3 million people to hospital emergency departments every year.

Progress in motor vehicle injuries

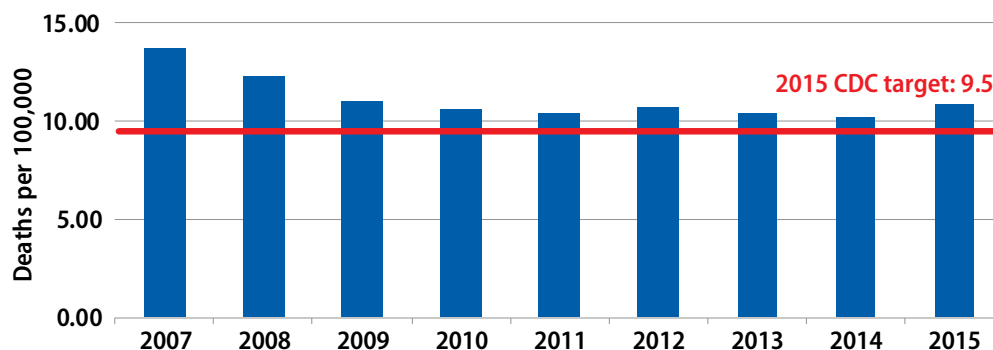
Motor vehicle-related deaths decreased between 2007–2015



<http://www.iihs.org/iihs/topics/t/general-statistics/fatalityfacts/state-by-state-overview>

Trends in Motor Vehicle Injuries Winnable Battle Indicator

Trends in motor vehicle-related fatalities, 2007–2015



Source: National Highway Traffic Safety Administration (NHTSA). Fatality Analysis Reporting System (FARS) U.S. Census Bureau

Considerations in Choosing Motor Vehicle Injuries as Winnable Battle

- Motor vehicle crash deaths cost the nation \$44 billion in medical expenses and work loss costs in a single year.
- The demonstrated effectiveness of primary seat belt laws created an opportunity for near-term success in lowering motor vehicle-related deaths.
- Other evidence-based strategies, such as ignition interlocks and graduated driver's license (GDL) programs, created additional opportunities for improved motor vehicle safety.

Challenges/Obstacles

- Linking motor vehicle crash data from various sources (police, EMS, emergency departments, hospitals, medical examiners, and coroners) can be complex, but data linkage is necessary to share critical information about what happened before, during, and after a crash providing a complete picture that informs prevention efforts.

CDC Contributions in Motor Vehicle Injuries Winnable Battle

By focusing on a few key strategies that would have the most impact on the health of Americans, the Motor Vehicle Injury Winnable Battle articulated a clear set of evidence-based policies and practices to reduce motor vehicle injuries and deaths.



Prevent crash-related deaths by increasing restraint use and decreasing impaired driving

- CDC released an interactive calculator, called the MV PICCS (Motor Vehicle Prioritizing Interventions and Cost Calculator for States). This tool helps state decision makers prioritize and select from a suite of 14 effective motor vehicle injury prevention interventions. It is designed to calculate the expected number of injuries prevented and lives saved at the state level, as well as the costs of implementation, while taking into account the state's available resources.
- Transportation Safety has been a feature of the CDC Vital Signs seven times since 2011. Recent issues include child-passenger safety and looking at fatalities in the context of other high-income countries.
 - » CDC released a July 2016 Vital Signs comparing motor vehicle crash death rates in the United States and 19 high-income comparison countries. Data compiled by the World Health Organization (WHO) and the Organization for Economic Co-operation and Development (OECD) were analyzed. CDC determined the number and rate of motor vehicle crash deaths (per 100,000 population, per 100 million VMT, and per 10,000 registered vehicles) in the U.S. and 19 other high-income countries and reported national seat belt use and percentage of deaths that involved alcohol-impaired driving or speeding, by country, when available. The United States has made progress in road safety, reducing crash death rates by 31 percent from 2000 to 2013. But other high-income countries reduced crash death rates even further—by an average of 56 percent during the same period.
 - » CDC released a Vital Signs on child passenger safety in February 2014 which reported motor vehicle crash deaths among children age 12 and younger decreased by 43% from 2002–2011; however, still more than 9,000 children died in crashes during that period. Of children who died in a crash, one in three was not buckled up, and more black and Hispanic children were not buckled compared with white children.

- CDC's [State Specific Fact Sheets on Cost of Motor Vehicle Crash Deaths, Restraint Use, and Drunk Driving](#) highlight data and proven strategies for reducing injury and saving lives. States and their partners can download fact sheets with state-specific data and information that can help in implementing strategies to save lives.
- To support efforts to keep impaired drivers off the road, CDC released "[Increasing Alcohol Ignition Interlock Use: Successful Practices for States](#)" and in partnership with NHTSA released the "[Evaluation of the State Ignition Interlock Programs](#)."
- [Prevention Status Reports \(PSRs\)](#) are state-level reports that highlight the status of policies and practices in states designed to address 10 important health problems, one of them being motor vehicle injury. It includes new details and recommended components of the graduated driver licensing indicator. Research indicates that more comprehensive GDL systems prevent more crashes and save more lives than less comprehensive GDL systems. Other indicators cover the use of seat belts, car seats and booster seats, and ignition interlock devices.
- To raise awareness and promote prevention of teen driving related injuries and deaths, CDC re-launched [Parents Are the Key](#), a campaign that provides information and tools for parents, pediatricians, and communities around safe teen driving. Motor vehicle crashes are the leading cause of death among teens. Over 100,000 people have accessed the website and 40,000 materials have been downloaded.

Improve motor vehicle safety in occupational settings

- Motor vehicle crashes are the leading cause of work-related fatalities in the United States, accounting for over 22,000 deaths between 2003 and 2014. The number and rate of deaths declined in 2008 and 2009, in line with the decline in traffic deaths in the general population. Since 2009, however, both indicators have begun to increase again, although not to pre-2008 levels.
- Employer and worker information on motor vehicle safety was prepared and broadly disseminated including: to truckers on the importance of wearing a seatbelt and obtaining quality sleep to prevent drowsy driving; to employers on steps they can take to develop effective motor vehicle safety programs; and to workers and employers on safe driving at work by older workers.
- Based on CDC work, a national consensus standard used by employers to develop safe workplace driving programs includes stronger language on employer policies on seat belt use, fatigue management, and speed control.
- The NIOSH National Survey of Long-haul Truck Driver Health and Injury found that: 35% of drivers had experienced a crash during their career; 6% never wore a seat belt while driving a truck; sometimes or often, 37% did not follow hours-of-service rules that limit driving time; 73% perceived delivery schedules as too tight, at least some of the time; and 38% reported having received inadequate entry-level training.
- Linked worker fatality data from the Departments of Labor (DOL) and Transportation (DOT) support a view of work-related crashes as a broad, multi-faceted risk that is not limited to truck drivers and other "professional" drivers. The DOT data, based on police crash reports, were considerably less likely to identify certain types of fatalities as work-related: workers employed outside transportation industries and occupations, and those who were driving in or riding in lighter vehicles.





Tribal Spotlight: The Hopi Tribe

Unintentional injury was a leading cause of death in Arizona for American Indians/Alaska Natives, all ages, from 1999-2009 with motor vehicle related injuries the leading specific injury type.¹ On the Hopi Reservation, motor vehicle-related injury was the leading cause of injury death from 2004-2008,² and occupant restraint use on Hopi Reservation was historically very low.³

To combat these issues, the Hopi Tribe used CDC funding to improve collaboration with law enforcement to strengthen their existing seat belt law. Also, a successful media campaign raised awareness among tribal members about the importance of buckling up. The campaign, educational efforts, and improved enforcement led to an increase of 36% (from 39% to 53%) in seat belt use, and increase of 32% (22% to 29%) in child safety seat use.

Improve motor vehicle safety, decrease crashes and reduce motor vehicle related fatalities among tribal populations

- Motor vehicle crashes are a leading cause of unintentional injury for American Indians/Alaska Natives (AI/AN) ages 1 to 44 and AI/AN adults are 1.5 times more likely to die in a crash than whites or blacks. In September 2015, CDC in partnership with the Indian Health Service (IHS) developed the Roadway to Safer Tribal Communities Toolkit to provide materials including fact sheets, posters and a video to help prevent crash-related injuries and deaths among members of tribal nations.
- In late 2016, CDC will disseminate the Tribal Motor Vehicle Injury Prevention (TMVIP) Best Practices Guide, in collaboration with Federal partners, which will share the results of the 2010–2014 Tribal Motor Vehicle Injury Prevention Program.
- CDC's tribal motor vehicle safety program (Tribal Motor Vehicle Injury Prevention Program) decreased crashes, increased restraint use, and decreased alcohol-impaired driving through direct funding of 12 tribes. CDC built on this success and expanded its reach to a greater number of tribes by partnering with the Federal Highway Administration. This partnership

allows CDC to reach up to 37% of the 567 federally recognized tribes in the United States to reduce motor vehicle-related fatalities and injuries in Indian Country through technical support, training, and other activities.

Deepen understanding of motor vehicle crashes through improved data linkages to improve prevention efforts

- CDC and NHTSA conducted a joint evaluation to increase knowledge about 25 state data linkage systems, including NHTSA's Crash Outcome Data Evaluation System (CODES).
- CDC is beginning work on a state data linkage implementation manual. High quality, reliable linked data are needed to
 - » show the total impact of crash injuries (e.g., medical and costs)
 - » support states in identifying crash risk factors (e.g., restraint use)
 - » design and implement effective strategies
 - » evaluate implemented strategies

¹ Centers for Disease Control and Prevention/Web-based Injury Statistics Query and Reporting System.

² A. Shacter, unpublished data.

³ IHS/OEHE, unpublished data.



TEEN PREGNANCY

Teen births have been dropping steadily.

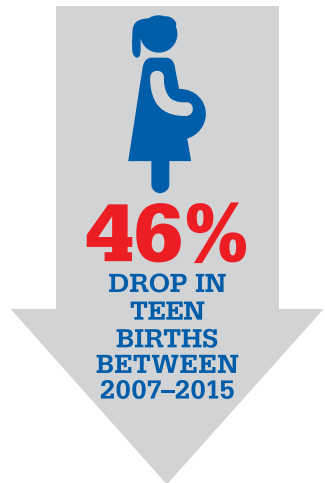
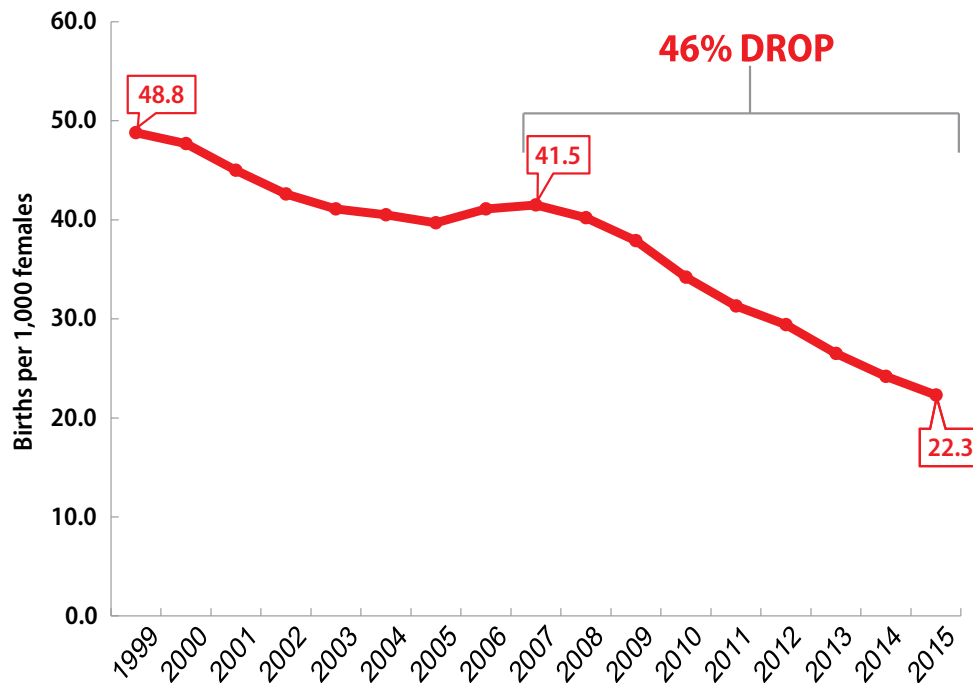
■ In 2009, the number of births to teenage mothers was 409,802 — a birth rate of 37.9 per 1,000 women aged 15 to 19.

■ In 2015, the birth rate among adolescent females was 22.3 births per 1,000 females (down approximately 46% since 2007).



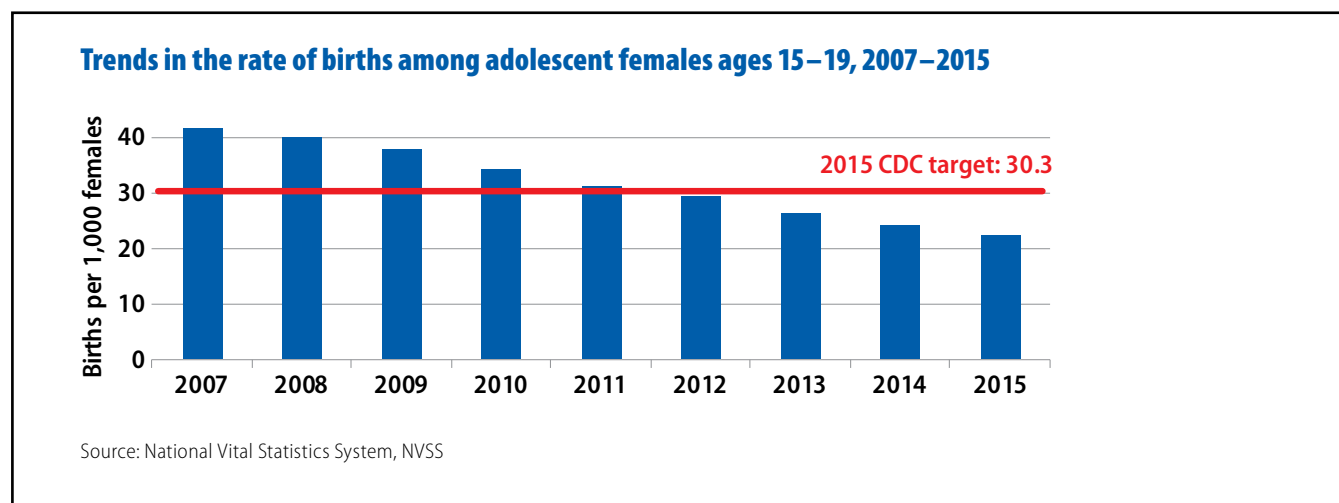
Progress in Teen Pregnancy Prevention

Major decrease in teen births between 2007–2015



CDC/NCHS, National Vital Statistics System

Trends in Teen Pregnancy Winnable Battle Indicator



Considerations in Choosing Teen Pregnancy as Winnable Battle

- Even in a climate of dropping rates in recent decades, considerable disparities existed in the rates of teen pregnancy and birth among the nation's racial and ethnic groups. Together, 57% of teen births in 2014 were to African American and Hispanic youth, although they represent only 35% of the total population of 15–19 year old females.
- Teen childbearing costs U.S. taxpayers \$9.4 billion annually.
- Teen pregnancies can have immediate and long-term negative effects for teen parents and their children, as well as create substantial social and economic costs to our society.
- Pregnancy and birth are significant contributors to high school dropout rates among girls, and their children also are more likely to have lower school achievement and drop out of high school.
- First funded in 2010, the HHS Office on Adolescent Health, dedicated to improving the health and well-being of adolescents to enable them to become healthy, productive adults, opened up new opportunities to collaborate on teen pregnancy prevention.

Challenges/Obstacles

- Despite gains, the United States has one of the highest rates of teen births of all other industrialized countries.

CDC Contributions in Teen Pregnancy Winnable Battle

By focusing on a specific set of strategies including support for access to contraception, increased uptake of the most effective types of contraception, and improving the quality of family planning services offered, teen pregnancy rates continue to decline.

Strengthen effective clinical interventions and promote the use of the most effective contraceptive methods

- In 2014, CDC, in collaboration with the Office of Population Affairs (OPA), released the Quality Family Guidelines, giving all providers access to national, evidence-based guidance on family planning service delivery, including specific recommendations for serving adolescent clients. This followed the previous development and release in 2010 of the U.S. Medical Eligibility Criteria for Contraceptive Use (US MEC) and, in 2013, the U.S. Selected Practice Recommendations for Contraceptive Use (US SPR), which together comprise comprehensive evidence-based guidance for providing reproductive health services and offering appropriate contraception to adults and adolescents.
- Developed and disseminated provider tools to support widespread understanding and use of the Medical Eligibility Criteria and Selected Practice Recommendations for Contraceptive Use, and for the QFP Guidelines. For example, worked with the American Academy of Pediatrics to develop and pilot a training course for pediatricians to ensure pediatricians have the knowledge, skills and motivation to screen adolescents for sexual activity, and to counsel them about contraception and other reproductive health matters.

- CDC, in partnership with the Office of Adolescent Health (OAH), implemented community-wide initiatives in 10 communities to reduce teen pregnancy and births in communities with the highest rates. This program has:
 - » Reached 53,428 youth with evidence-based interventions (EBIs) to prevent teen pregnancy.
 - » Provided contraceptive and reproductive health services to over 50,000 individual adolescents through 63 partner clinics.
 - » Increased long acting reversible contraception (LARC) coverage by 80% among adolescent clients served by health center partners, particularly among African American and white adolescents between 15 and 19 years of age. LARC includes intrauterine devices (IUDs) and implants.

Support health system changes to increase access to LARC

- After developing and disseminating recommendations and guidelines stating that LARC are safe and appropriate for adolescents, Teen Pregnancy Winnable Battle activities include identifying and recommending approaches for addressing health system barriers

to LARC access. CDC, in collaboration with the Association of State and Territorial Health Officials (ASTHO), worked to disseminate information and provide learning opportunities to support removing barriers to the use of LARC. Working with Centers for Medicare & Medicaid Services (CMCS) and other partners, CDC identified barriers to Medicaid payment for post-partum LARC placement, and has supported peer to peer information sharing among states to develop practices to reduce payment barriers. Improvements in contraceptive access, including LARC, were reported in a recent study as a primary determinant of the decline in teen pregnancy.

Expand the evidence base on outcomes

- In January 2014, CDC initiated a systematic review to examine the body of evidence documenting observed health, economic, and social consequences of teenage pregnancy through systematic review and meta-analytic techniques. CDC met with economic experts and policy leaders (August 2014) to discuss and review the systematic review protocol. The review is expected to be completed in 2016.

State Spotlight: Gaston County, North Carolina

Gaston County, North Carolina historically has had high rates of teen birth. The average birth rate from 2006-2009 was 56.4 per 1,000 females aged 15-19 years; this was 21% higher than the state average. Ethnic and racial disparities meant the teen birth rate for Gaston minority females was 30% higher than for Gaston Caucasian females.

In 2010, CDC's Division of Reproductive Health and HHS' Office of Adolescent Health awarded funds to North Carolina (SHIFT NC) to implement the Gaston Youth Connected Program (GYC), a community-wide initiative to tackle teen pregnancy.

From 2010 through 2013, GYC worked to ensure that African Americans in Gaston County were engaged in all project components. By the end of the first year of program implementation, program success included: African Americans made up 67% of Community Mobilization Team members, 50% of Teen Action Council members, and 17% of the Core Partner Team. For participant recruitment, program partners used county maps with highlighted areas with the highest teen birth rates, resulting in 71% of participants from targeted areas and 75% African American program facilitators at the end of the first year. Of enrolled participants, 57% were African American, representing a 187% increase in participation among African American youth compared with the previous year. Responses from African American participants showed an increase in knowledge and intention related to prevention of pregnancy.

Further, a Teen Wellness Center (TWC) was created, where adolescents receive a full range of health services in one location. The number of TWC referrals from school personnel more than tripled in the first two years. The number of contraceptive clients increased 3.5%, and 18% of females who were provided contraception received long-acting reversible contraception (LARC), up from 15% in 2010.

From 2010 to 2012, Gaston County's teen pregnancy rate dropped 28%. Most importantly, for the first year on record, Gaston County's African American teen pregnancy rate was 40.4 per 1,000 15-19 year old girls, lower than the county's Caucasian teen pregnancy rate of 41.1 in 2012. The longstanding disparity between Caucasian and African American teen pregnancy rates was eliminated, drawing national attention to Gaston County's success.



HIV IN THE UNITED STATES

The percentage of people living with HIV who know their status is steadily increasing toward the 90% target.

CDC estimates that 1,242,000 persons aged 13 years and older were living with HIV infection at the end of 2013, including 161,200 (13.0%) who are unaware of their infection.

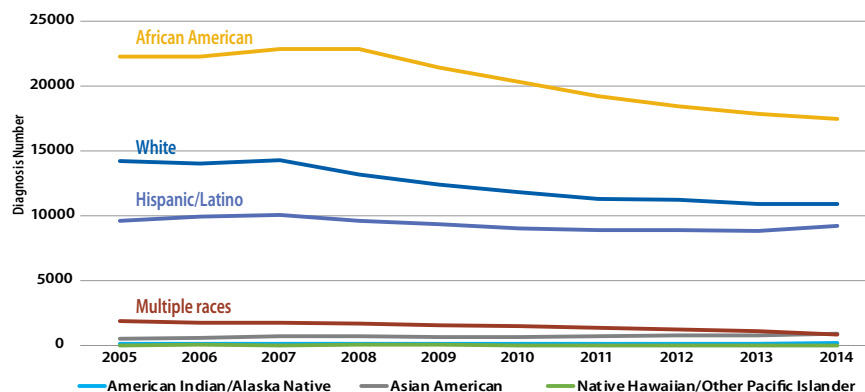
In 2014, an estimated 39,718 people received a diagnosis of HIV infection. The annual number of diagnoses declined by 17.9% from 2008 to 2014.

Trends in HIV disparities

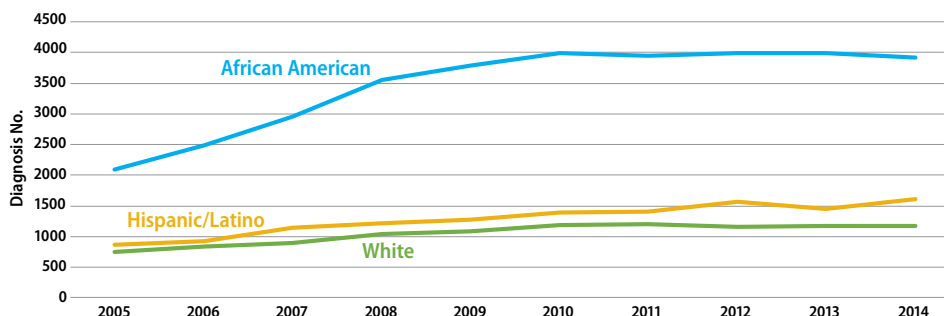
HIV Diagnosis by Race/Ethnicity, 2005–2014

Source: CDC Fact Sheet: Trends in U.S. HIV Diagnoses, 2005–2014.

Note: Data are not adjusted for reporting delays.



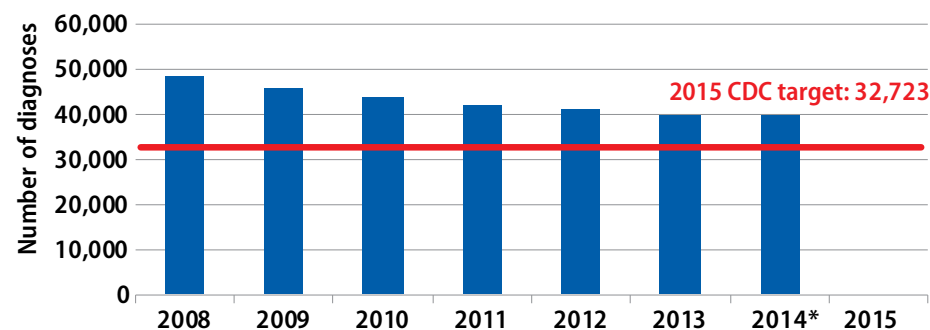
HIV Diagnosis among MSM age 13–24, by Race/Ethnicity, 2005–2014



2015 National HIV Prevention Conference, CDC HIV surveillance data

Trends in HIV Winnable Battle Indicators

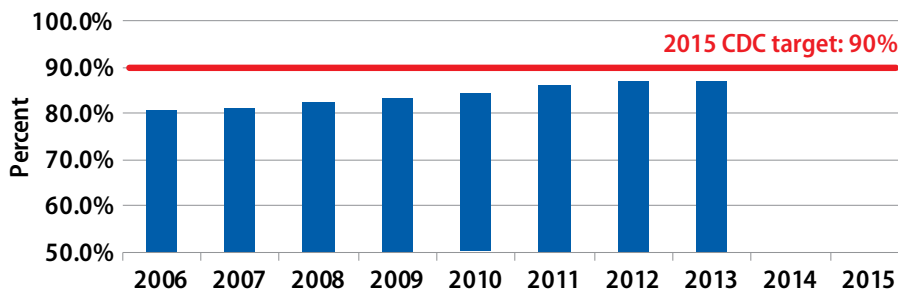
Trends in the number of HIV diagnoses, 2008–2014*



Source: CDC's HIV/AIDS Surveillance System.

*2014 data are preliminary

Trends in the number of people living with HIV who know their status, 2006–2013



Source: CDC's HIV/AIDS Surveillance System

Considerations in Choosing HIV in the United States as Winnable Battle

- Serious health disparities among populations and risk groups:
 - » In 2008, Africans Americans accounted for 40% of people living with HIV and Hispanics accounted for 20%, respectively.
 - » Also in 2008, almost 52% of people living with HIV were infected through male-to-male sexual contact and 16% through injection drug use.
- Estimated lifetime cost of more than \$400,000 per person for direct medical care.
- Opportunity to collaborate and leverage federal initiatives and partnerships including National HIV/AIDS Strategy (released July 2010 and updated in July 2015 to 2020), and the Presidential Advisory Council on HIV/AIDS.

Challenges/Obstacles

- HIV and AIDS remain a persistent problem for the United States and countries around the world.
- Gay, bisexual, and other men who have sex with men (MSM) of all races and ethnicities remain the population most profoundly affected by HIV in the U.S.
- In the United States, the burden of HIV and AIDS is not evenly distributed across states and regions. The rates of HIV and AIDS diagnoses are higher in the South.
- Too many people living with HIV are not receiving ongoing care and achieving viral suppression.
- Not enough providers and individuals know about effective, new prevention tools, including prevention medications.

State Spotlight: New Jersey & Linkage to Care

With CDC's support, the New Jersey Department of Health is working to quickly link people with newly diagnosed HIV to care, maintain the continuity of their care, and help them adhere to their HIV medications.

To accomplish this, health department staff use fourth-generation HIV testing technology that can detect acute HIV infection, and then quickly connect people who test positive to HIV prevention "patient navigators." These professionals are embedded in infectious disease practices and other clinics statewide, and can help people obtain a second confirmatory test and get linked to HIV care within 24 hours of diagnosis or on the next business day. Once people are receiving care, patient navigators can also help them access the prevention services and other support they need to adhere to their medications and protect others from infection.

CDC Contributions in CDC Winnable Battle

Since 2010, CDC has adopted a high-impact prevention (HIP) approach aimed at identifying and implementing cost-effective and scalable interventions and aligning them with the geographic and demographic burden of HIV infection. CDC expanded efforts to maximize the percent of people with HIV who have suppressed viral load by improving diagnosis, linkage and retention

in care, and antiretroviral provision and adherence. CDC also has led a national shift in the use of data for program improvement, public accountability, and public health action by implementing a number of changes aimed at increasing state health department and other CDC grantee use of data for program improvement.

Improved awareness and diagnosis of HIV

- CDC has expanded its testing efforts, especially focusing on communities that have a high burden of HIV infection among African Americans and Hispanics.
- CDC has developed recommendations on emerging testing technologies, including antigen/antibody combination tests (4th generation), to enable earlier diagnosis and prompt linkage to care.
- Through its Act Against AIDS (AAA) initiative, CDC raises awareness among patients, providers, and the public about HIV. Collectively, AAA efforts have reached millions of people through extensive ad placement, social media engagement, provider information kits and meetings, conferences and trainings. In December of 2015, CDC launched the AAA – Doing IT media campaign, which is designed to motivate all adults to get tested for HIV and know their status.
- CDC provides tools to medical providers to support increased testing and increased implementation of CDC’s HIV testing recommendations.

Maximizing Viral Suppression

- Viral suppression not only improves health outcomes for people living with HIV, it also prevents HIV transmission.
- In recognition of the benefits of early treatment, and thus the need for immediate linkage to HIV medical care for all persons newly diagnosed with HIV, CDC changed its linkage to care goal from within three months of diagnosis to linkage to care within one month of diagnosis.
- CDC and our state partners are increasingly using surveillance data to identify HIV-infected persons not in HIV care and target efforts to get these persons back in care and virally suppressed. In 2015, CDC initiated a demonstration project to support efforts to improve state’s ability to use these “data to care” strategies to achieve higher viral suppression rates.
- CDC, in collaboration with partners, published Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014 which update and expand recommendations from 2003. The updated recommendations address recent advances in biomedical, behavioral and structural interventions and are directed to a broad range of health professionals and organizations focused on optimizing health outcomes for people with HIV and reducing their risk of exposing others to HIV.
- In 2015, 44 states and D.C. (up from 42 states in FY2014) required reporting of all CD4 and viral load values to health departments for surveillance purposes, which supports CDC’s emphasis on using data to track improvements in viral suppression rates.

Expanding the utilization of new prevention tools

- In 2014, CDC updated its Compendium of Evidence-Based Interventions which is divided into three chapters: Linkage to, Retention in, and Re-engagement in HIV Care, Medication Adherence, and Risk Reduction. The updated Compendium provides a comprehensive list of up-to-date, scientifically proven, HIV behavioral interventions that reduce sexual or injection risk behaviors that can be used to guide programmatic planning throughout the U.S. CDC updates the Compendium annually with new best practices and interventions.
- In May 2014, the U.S. Public Health Service and CDC released the first comprehensive clinical practice guidelines for PrEP, which is a way for people who do not have HIV but who are at substantial risk of getting it to prevent HIV infection by taking a pill every day.
- Not many providers know about PrEP (Pre-Exposure Prophylaxis), so CDC is educating clinicians about the potential of PrEP as a powerful, new prevention tool by: creating and supporting PrEPline, a consultative telephone service to support clinicians who have questions; developing medical provider resource kits and medical education courses; and sharing medical provider screening tools.
- In 2015, CDC funded a demonstration project to increase the uptake of PrEP in MSM and transgender persons at substantial risk of acquiring HIV.
- To raise general awareness about PrEP, CDC has developed materials for the public and incorporated PrEP information into relevant communication campaign materials.

Using Data to Inform Public Health Action

- CDC revised the algorithms for allocating funding to health departments for HIV prevention programs and surveillance. The new funding approach better aligns resources to reflect the geographic burden of HIV today, so that those areas with the greatest burden of disease also receive proportionately more support.
- To meet the needs of national, state, and local partners as well as the general public, CDC has created an interactive platform for accessing data about HIV, viral hepatitis, sexually transmitted diseases (STDs), and tuberculosis (TB). The NCHHSTP Atlas is the one-stop shop for CDC’s most recent surveillance data on HIV, viral hepatitis, STDs, and TB. The [Atlas](#) provides access to more than 10 years of the most essential CDC data for these diseases at the national, state, and county levels, and by populations. The Atlas can also be used to see disease trends over time and the burden of these diseases in various communities.

WHAT WE HAVE LEARNED

In 2010, Winnable Battle programs ran the gamut: Some were large, well-resourced programs with sophisticated policy and communications operations that were accustomed to utilizing many outlets to ensure their evidence-based strategies reached the field. Other Winnable Battle programs were small, research-focused offices without the resources to develop approaches that would translate their science to policies and practices that were usable in the field. The effect of being a Winnable Battle program varied depending on its starting point.

For example, having direct, regular contact with the director helped Tobacco and HIV, both of which are highly

“Winnable Battles pushes us out of our comfort zone and into action,” said Althea Grant, PhD, who led several emerging Winnable Battle programs for the agency. “We are typically researched-focused and the Winnable Battles approach is translation-focused, meaning the emphasis changes. The goal is to put into practice now what we know works to improve health.”

visible, large programs. The ability to discuss strategy on specific projects and obtain the leadership’s expertise and real-time feedback helped these programs avoid what could be weeks or months of work that was not optimally focused.

Other, smaller programs, such as Healthcare-Associated Infections and Motor Vehicles, were able to leverage this direct connection with CDC leaders to establish or strengthen critical relationships with the leadership of other HHS agencies and other offices across government. Once these relationships were formed and agreement about overall joint projects was established, staff were able to work across agencies much more productively.

One example of cross-agency work can be found in the Tobacco Winnable Battle. CDC began providing technical support to the FDA in the area of tobacco control, where CDC’s science and analyses inform the FDA in accomplishing its regulatory work.

Another example comes from Motor Vehicle Injuries. CDC signed a memorandum of understanding (MOU) with the National Highway Traffic Safety Administration, following which the Injury Center’s Transportation Safety Team was able to work with NHTSA staff on ignition interlock research and other motor vehicle injury prevention efforts.

The CDC senior leadership’s ability to build bridges with the Centers for Medicare and Medicaid Services (CMS) has dramatically increased the number of hospitals reporting healthcare-associated infections. CDC’s Division of Healthcare Quality Promotion, lead of the Healthcare-Associated Infections Winnable Battle team, collaborated with CMS to promote the nascent surveillance system, the National Healthcare Safety Network, to become the standard surveillance system for tracking and targeting healthcare-associated infection prevention efforts to meet HHS and Winnable Battle goals.

For other programs, the opportunity to access the expertise and vision of other senior leaders, including the Associate Directors of Communications, Science, and Policy could be invaluable. One example of the synergy created by Winnable Battles within the agency is found in Teen Pregnancy. The Division of Reproductive Health (DRH) and the Division of News and Electronic Media in the Office of the Associate Director of Communication (OADC) collaborated to develop a [Teen Pregnancy Social Media Toolkit](#) to better reach teens where they are online.

Another example comes from Food Safety. The Division of Foodborne, Waterborne, and Enteric Diseases (DFWED), which was designated the lead program for the Food Safety Winnable Battle, is a science-focused office that has great expertise in outbreak response and surveillance. The Winnable Battle designation gave the program the opportunity (and impetus from leadership) to think differently – to focus on preventing, rather than on merely reducing foodborne illness. Working closely with the Associate Director for Communication, DFWED staff embraced a broader connotation of Food Safety to prevent and respond to health threats in the nation’s food supply and consequently expanded its identity and role in public health.

“As a Winnable Battle, we were challenged to be strategic and prioritize our activities based on how much we can impact the health of Americans,” noted Ann Dellinger, PhD, MPH, who previously served CDC as epidemiologist and team leader for the Motor Vehicle Injury Prevention Team at NCIPC. “How do we save as many lives as possible? We focused on some of the policy changes to facilitate more widespread adoption of critical behaviors, like wearing your seat belt.”



Sharing the Message

In addition to making progress on the Winnable Battle focus areas, the agency wanted to share ongoing successes and challenges across CDC. CDC Director Dr. Frieden updated staff on Winnable Battles at All-Hands meetings. An intranet site, email listserv and information sharing events provided virtual and face-to-face forums to update staff on strategy, approaches and tools.

Early in 2012, CDC held an Expo, at which each Winnable Battle program created a display which they staffed and provided short talks. The Expo was an opportunity for Winnable Battle programs to highlight strategies, approaches and products each has used to promote the public health goals in their focus areas. Designed as a showcase of the strategies and products used to achieve those accomplishments, the Winnable Battles Expo featured presentations on how strategies and products were developed, their impact, and lessons learned. The Expo provided an informal setting to give attendees a better understanding of Winnable Battles “best practices,” as well as inspire programs throughout the agency with new ideas that could be applied to their work.

CDC organized several “Lunch and Learns” around specific themes such as strategies for accelerating progress through partnerships and new tools and resources to

demonstrate the effectiveness of interventions. Programs also connected informally on common issues on which one may have progressed and could advise the other.

While the designation of “Winnable Battle” did not bring with it automatic additional funding, Winnable Battles did have access to certain agency resources to enhance their work, including support from the highest levels of the Director’s office. For example, some of CDC’s best communications offerings were made available. Winnable Battles generally had an annual Vital Signs issue devoted to an aspect of their focus area. Each Vital Signs is followed by a set of communications activities, including a virtual Town Hall, giving programs a unique opportunity to focus external attention on a particular issue, including burden data and recommended evidence-based interventions.

When opportunities came to the agency or were offered by the Office of the Director, Winnable Battle programs often were prioritized to take advantage of them. For example, applications to an OADP (Office of the Associate Director of Policy) Policy Competition were required to address HHS or CDC health priorities and used Winnable Battles to describe the agency’s priorities.

APPLYING WHAT WE HAVE LEARNED

CDC Use of Winnable Battles Approach

Another important aspect of the Winnable Battles initiative has been to test and apply the process itself as a way to approach public health challenges by CDC. Recognizing the benefits of the Winnable Battles framework as applied to the initial focus areas, the agency

began deploying the Winnable Battles framework to address additional health challenges. Agency leadership encouraged the use of the Winnable Battles approach for a variety of issues and for different reasons. Areas that have adopted the Winnable Battles approach include:

Health Concern	Using the Winnable Battles Approach
Public health impact of prescription drug overdose	The Winnable Battles framework allowed the agency to address quickly this emerging public health threat with a dedicated and focused team and work in collaboration with other federal and non-federal partners in a dynamic environment.
Adoption of the Human papillomavirus (HPV) vaccine	A small working group of subject matter experts from across the agency began this work but struggled to make progress. Adopting the Winnable Battles framework led to engagement with senior leadership and a coordinated high-level approach. As a result the team was able to prioritize strategies, tap into resources beyond the individual offices including experience of senior leadership in policy and communications, and gain strategic focus.
Health effects of excessive alcohol use	Work on the health effects of excessive alcohol use involves several CDC offices, including the National Institute for Occupational Safety and Health, the National Center for Chronic Disease Prevention and Health Promotion and the National Center on Birth Defects and Developmental Disabilities. To better align these efforts and utilize resources efficiently as possible, CDC adopted the Winnable Battles framework to help guide its work on health effects of excessive alcohol use.
Treatment of attention deficit and hyperactivity disorder (ADHD) in young children	The Winnable Battles approach enabled this small program in the CDC's National Center on Birth Defects and Developmental Disabilities to garner agency-wide leadership support and collaboration to refine and advance its work on an initiative that can have great impact.

“Winnable Battles has fundamentally changed the way we work on high priority health issues,” said Kathleen Ethier, PhD, Director of the Program Performance and Evaluation Office, CDC. “We now have a better way of moving forward with the most effective strategies when health concerns develop, like the public health impact of prescription drug overdose.”

While these different health issues presented specific challenges, all have benefited from the hallmarks of the Winnable Battles approach: leadership engagement and real-time feedback, establishing priorities, focus on data, accountability and partnerships.

State Adoption of Winnable Battles Approach

Additionally, individual states adopted the Winnable Battles framework to address their own public health priorities. Colorado unveiled its own Winnable Battles

with a dedicated [web site](#). Colorado's Winnable Battles are key public health and environmental issues where progress can be made in the next five years. These 10 Winnable Battles were selected because they provide Colorado's greatest opportunities for ensuring the health



of its citizens and visitors and the improvement and protection of the state's environment. Many of Colorado's Winnable Battles align with CDC Winnable Battles or are consistent with the Seven Priorities for EPA's Future, while others reflect Colorado's own unique priorities.

In addition to Colorado, other states including Arizona, Georgia and Maryland have adopted the Winnable Battles language to frame their public health work. As part of a strategic plan, the Arizona Department

of Health adopted five Winnable Battles to address including Promoting Nutrition and Physical Activity to Reduce Obesity, Reducing Tobacco Use & Substance Abuse, Reducing Healthcare-Associated Infections, Reducing Suicides, and Reducing Teen Pregnancy.

As stated on its web site, the Maryland Department of Health and Mental Hygiene adopted Winnable Battles as a platform to bring together diverse programs and staff to look at new ways to impact health outcomes and operations. Winnable Battles at the Maryland Department of Health and Mental Hygiene:

- Identifies critical health issues in the State and opportunities for business improvements within the Department;
- Brings together diverse teams to explore new and innovative ways to approach these opportunities; and
- Selects specific, measurable actions to take over the course of one year.

Using a common framework and language creates a platform for collaboration between CDC and the states to work together on public health priorities.

WHAT'S NEXT/CLOSING COMMENTARY

The CDC Winnable Battles began as a set of six priority public health areas where focused, coordinated effort across multiple levels of CDC in collaboration with states and tribes could lead to improved health outcomes in a shorter period of time. Although progress in these six areas has been mixed with some areas achieving their goals and others not quite reaching the mark, the process itself has had a transformative effect on the agency and how we do our work.

Winnable Battles helped the agency articulate a set of priorities against the ever changing backdrop of our nation's health. It provided an outcome-focused mechanism to combat select high-priority health issues as the agency continued its work to protect the health of our nation from established and emerging threats to our population across all aspects of health and well-being. The Winnable Battles framework gave its topic areas a focused path forward even as the agency rose to the challenge of several global health crises including H1N1, Ebola and Zika.

In addition, the Winnable Battles process has been infused into the way state and local public health

professionals, policy makers and healthcare professionals, identify, prioritize and take action to improve health outcomes in their jurisdictions. It has served as a catalyst for states to engage across stakeholders to improve public health through the creation of Winnable Battles State Action Plans, drafted by 32 state teams of legislators and public health officials, with consequent programming and policy changes. The program fostered more awareness on the positive impact of identifying priorities, driving accountability and sustaining effort in public health work.

Winnable Battles has emerged as a framework on high burden, high priority public health work to help align and accelerate intra- and interagency work as well as encouraging programs to think more broadly about partnerships beyond traditional public health partners. Though the Winnable Battles process as it has been called will enter a new phase after this year, the successes achieved and lessons learned will continue to be applied to new public health challenges.

APPENDIX

Resources

- **Winnable Battles Web Site:** Updated presentations with national and state data as well as recommended approaches and initiatives. Subscribers to the Winnable Battles web site receive a periodic “*News You Can Use*” eNews Blast that shares innovative practices, tools and strategies to inform public health work.
- **CDC Vital Signs:** Each month, the CDC Vital Signs Program releases a call-to-action about an important public health topic, typically one of the Winnable Battles focus areas. Vital Signs uses the most recent CDC data on health behaviors and outcomes to create materials for key partners and the public and includes scientific papers, infographics, short videos, key messages and more. Vital Signs on Winnable Battles topics can be found at <http://www.cdc.gov/vitalsigns/> or www.cdc.gov/winnablebattles. The resources are free and available for download or print.
- **Virtual Town Hall Meetings:** All public health professionals are invited to a town hall teleconference on the latest CDC Vital Signs report on the second Tuesday of each month at 2–3 pm (ET). Featuring informative subject matter experts and health department officials, the teleconferences are designed to provide a forum for health officials to broaden the conversation, build momentum, and carry out evidence-based, effective programs within the public health areas covered by Vital Signs.
- **Did You Know? (DYK):** These quick bullet points are emailed to about 30,000 subscribers weekly to inform public health professionals and move CDC data and recommendations into action. Readers use DYK to educate their constituents; start, change, evaluate, or support programs, policies, and practices; and share with staff, community organizations, boards of health, leaders and decision makers, and others. DYK is also CDC’s most popular syndicated content.
- **Prevention Status Report:** In 2016, CDC released the third set of Prevention Status Reports (PSR) for all 50 states and the District of Columbia, with information on key indicators of public health status, practice, and policy for each Winnable Battle area. Through the PSR, CDC is helping advance evidence-based policy and practice by sharing with health officials and other policy makers each state’s status on key public health indicators and performance on key policy indicators. Public health leaders can use the PSRs to support public health planning, priority setting, and communications. Although the PSRs include data about public health problems, their primary focus is on policies and practices that can prevent or reduce health risk behaviors and lead to improved health outcomes. Posted at www.cdc.gov/psr, the free reports are available by topic or state.
- **Sortable Stats:** Free and available online, Sortable Stats is an interactive data set comprised of behavioral risk factors and health indicators. The online tool is used as a resource in the promotion of policy, system, and environmental changes. Its data set compiles state-level data for the 50 states, D.C., and U.S. territories from various published CDC and federal sources into a format that allows users to view, sort, and analyze data at state, regional, and national levels. Sortable Stats recently expanded to include data on youth marijuana use and cancer deaths. <http://wwwn.cdc.gov/sortablestats/>





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